



COUNTY BOROUGH OF BURY.

ANNUAL REPORT

OF THE

Medical Officer of Health,

FOR THE YEAR

1904,

BY

ALBERT E. BRINDLEY,

M.D. (LOND.), B.SC., D.P.H. (VICT.), ETC.,

MEDICAL OFFICER OF HEALTH FOR THE BOROUGH, AND
MEDICAL SUPERINTENDENT OF THE FLORENCE NIGHTINGALE
HOSPITAL FOR INFECTIOUS DISEASES.

BURY :

PRINTED AT THE "TIMES" OFFICE, CROSS STREET.

1905.

HEALTH COMMITTEE, 1904-1905.

CHAIRMAN - ALDERMAN PARKS.

DEPUTY-CHAIRMAN - ALDERMAN COLLINGE.

THE MAYOR.

ALDERMAN ASHWORTH,

„ BENTLEY,

„ DAWSON,

„ FLETCHER,

COUNCILLOR BRADLEY,

„ BRIDGE,

„ DUCKWORTH,

„ GREENHALGH,

COUNCILLOR HALL,

„ HARDMAN,

„ HARRISON,

„ R. KAY,

„ SHARP,

„ SLATER,

„ T. B. SMITH,

„ SPENCER,

„ JOS. TAYLOR.

*Meetings—The Wednesday in each month immediately preceding
the 14th day before the Council, at 10-0 a.m.*



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b28968372>

Health Department,

Parsons Lane,

BURY, May, 1905.

**To the Chairman and Members of the Health Committee
of the County Borough of Bury.**

Gentlemen,

I beg to submit to you my seventh Annual Report upon the Health of the Borough, being the Report of the Medical Officer of Health for the year 1904.

Included in the Report is an account of the working of the Factory and Workshop Acts in the town, in accordance with the requirements of the Home Office. Appended are the Reports of the Borough Analyst, the Female Sanitary Inspector, the Inspector of Nuisances, and the Meat Inspector. The records for the year show some satisfactory features on the one hand, but, on the other, several unsatisfactory elements in this Report may be noted. The Death Rate is lower than that for the previous year, although not so low as that recorded for the year 1902. The Birth Rate is higher than in 1904, in fact, is the highest recorded since the year 1900. There has been an upward tendency for this rate during the past two years, but little satisfaction can be derived from this increase, owing to a concurrent increase of the Infantile Mortality. [The year 1902 had the smallest Birth Rate recorded in Bury (20.86), and had also the lowest Infantile Mortality (128).] Some germ of satisfaction may be derived from a comparison of the year 1904 with 1903, in that in 1904 the Birth Rate was higher and the Infantile Mortality lower than the corresponding records for 1903. In the section of this Report dealing with Infantile Mortality, the immensely greater fatality among bottle-fed children, as compared with those fed naturally, in the first year of life, is very plainly shown. A similar comparative result was shown in the Annual Report for the year 1903.

An examination of the chief causes of death reveals the following facts :—(1) That Consumption and other Chest Diseases, such as Bronchitis and Inflammation of the Lungs, caused no fewer than 278 deaths (or over one quarter of the total deaths). (2) That Measles and Whooping Cough caused more deaths than Scarlet Fever, Diphtheria, Typhoid Fever, Smallpox, and Erysipelas combined. As the two infectious diseases, Measles and Whooping Cough, usually prove fatal through some “ Chest ” complication, it will be seen how great a part diseases of the Organs of Respiration play in the production of our Annual Death Rate. In the causation of these diseases or complications, atmospheric impurities (smoke, dust, &c.) doubtless play no inconsiderable part, and the attention of sanitarians in the future will be directed more and more towards the diminution of such impurities. The doctrine of the “ open window ” as a preventative of Consumption and other diseases would find far more adherents among housewives if the latter were assured of less interference with domestic economy, in the shape of less dirt in the household, with less need of frequent washing and cleaning of blinds, curtains, &c. The dust problem is one which is attracting considerable attention just now, and is admittedly one of great importance, not only from hygienic, but also from economic and utilitarian standpoints. In the process of street cleansing in the summer and autumn of the year 1904, much difficulty was experienced in minimising the disturbance of dust owing to the scarcity of water; satisfactory sanitary street scavenging cannot be effected without use of water in the process.

Another outbreak of Smallpox has, unfortunately, again to be recorded, causing both increased expense to the ratepayers of the Borough and increased strain upon the staff of the Health Department, and I take this opportunity of expressing my thanks to the Inspectors, Clerks, Disinfectors, and others for the manner in which they have supported me (often under trying circumstances) in getting rid of the outbreak. Even a small outbreak of this disease may be a very costly one from hospital isolation alone. Under the terms of formation of the Joint Hospital Board, the whole of the establishment charges of either hospital fall upon the users of the hospital. Hence it is that if one Authority alone uses

say, the Smallpox Hospital during one quarter (even though for a single patient), this Authority is debited with the entire cost of the upkeep of that hospital for the given quarter (and not merely with the patient's maintenance and proportionate share of the upkeep).

Further, it is proposed to apply to the Local Government Board for powers to borrow £13,000 for the provision of more permanent accommodation at Ainsworth, and of this amount Bury, as the largest of the constituent Authorities of the Board, will have to pay the largest share.

At the latter part of the year the unemployed problem became somewhat acute in the town, and for several months work was found in the Scavenging Department for a considerable number of these men.

Some satisfaction may be derived from the increased adoption of the water carriage system during the year, and from the system of collection of waste paper, which was inaugurated successfully in the later months. For the introduction and organisation of the latter we are indebted to Mr. Turner, Chief Clerk to the Cleansing Department.

Much valuable assistance has been received from Superintendent Noblett and the members of the Police Force, not only in dealing with Smallpox outbreaks, and in distributing handbills, but in many other ways; I take this opportunity of thanking Mr. Noblett and his staff for their ready help.

For special information contained in this Report I am indebted to Mr. R. B. Rigby (Water Manager) and Mr. James Isherwood (Clerk to the Guardians), and to many Medical Officers of Health; also I have to thank Dr. H. Kerr (Resident Medical Officer of the Infectious Diseases Hospital) for his kind assistance in preparing the Report. Finally, I wish to thank my fellow-officials of the Corporation for their advice and help throughout the year, and to you gentlemen for your kind co-operation and indulgence towards myself.

I am, Gentlemen,

Your obedient Servant,

ALBERT E. BRINDLEY,

Medical Officer of Health.



County Borough of Burn.

STATISTICAL SUMMARY, 1904.

Situation—Latitude, $53^{\circ} 36' \text{ N.}$; Longitude, $2^{\circ} 18' \text{ W.}$

Population, estimated to the	{	Males	27107	}	Total ...	58450
middle of the year 1904...	{	Females	31343	}		

Number of Inhabited Houses (Census 1901) 12692

Marriages (Bury Union) 1223

Births	{	Males	688	} Total ... 1383
		Females	695	

Annual Rate of Births per 1000 of the Population ... 23.66

Deaths	{	Males	515	} Total ... 1003
		Females	488	

Annual Rate of Mortality	{ Males 18.99 }	Total ... 17.14
per 1000	{ Females 15.57 }	

Excess of Registered Births over Deaths.....	380
--	-----

Infantile Mortality..... 163 per 1000 Births.

Density.—The mean density of the Borough from the census of 1901 is equal to 9·95 persons per acre :—In Church Ward, 28·53; East Ward, 15·0; Moorside Ward, 9·42; Redvales Ward, 8·69; Elton Ward, 6·86.

Area.—The Municipal Borough of Bury comprises parts of what were formerly the Townships of Tottington-lower-End, Shuttleworth, Bircle-cum-Bamford, Heap, Pilsworth, Pilkington, Radcliffe and Elton, as well as the township of Walmersley, and has a total area of 5907 acres.

Elevation.—The mean elevation of the Borough is about 300 feet above sea level, and varies between 223 feet at Blackford Bridge and 765 feet at Higher Sedger Hey.

Rainfall, 1904.—BURY. (Yard, Parsons Lane).

JAN...	Total Rainfall 3·56in.	
	Greatest fall in 24 hours 0·79in., date January 12th.	
	No. of days on which 0·0in. or more fell = 20.	
FEB...	Total Rainfall 3·86in.	
	Greatest fall in 24 hours 0·65in., date February 19th.	
	No. of days on which 0·1in. or more fell = 19.	
MAR...	Total Rainfall 2·57in.	
	Greatest fall in 24 hours 0·37., date March 29th.	
	No. of days on which 0·1in. or more fell = 15.	
APRL.	Total Rainfall 2·64in.	
	Greatest fall in 24 hours 0·47in., date April 2nd.	
	No. of days on which 0·1in. or more fell = 17.	
MAY..	Total Rainfall 2·56in.	
	Greatest fall in 24 hours 0·59in., date May 31st.	
	No. of days on which 0·1in. or more fell = 14.	
JUNE.	Total Rainfall 1·29in.	
	Greatest fall in 24 hours 0·37in., date June 13th.	
	No. of days on which 0·1in. or more fell = 9.	
JULY.	Total Rainfall 1·86in.	
	Greatest fall in 24 hours 0·53in., date July 2nd.	
	No. of days on which 0·1in. or more fell = 11.	
AUG..	Total Rainfall 4·85in.	
	Greatest fall in 24 hours 0·74in., date August 21st.	
	No. of days on which 0·1in. or more fell = 19.	
SEP...	Total Rainfall 1·45in.	
	Greatest fall in 24 hours 0·51in., date September 30th.	
	No. of days on which 0·1in. or more fell = 7.	
OCT...	Total Rainfall 2·38in.	
	Greatest fall in 24 hours 1·08in., date October 16th.	
	No. of days on which 0·1in., or more fell = 10.	
Nov...	Total Rainfall 4·20.	
	Greatest fall in 24 hours 1·37in., date November 8th.	
	No. of days on which 0·1in. or more fell = 18.	
DEC...	Total Rainfall 3·08in.	
	Greatest fall in 24 hours 0·61in., date December 15th.	
	No. of days on which 0·1in. or more fell = 15.	

	1904.	1903.
Total Annual Rainfall	34·30 ins. ...	52·73 ins.
Total number of days on which rain fell	174 ...	212

RAINFALL AT GREENWICH OBSERVATORY, 1904.

Total.....20.663 ins.
 Number of days 153

Estimated Population.—The Registrar-General estimated that the population of the Borough would be 58,450 at the middle of the year 1904, this being an increase of 137 over the estimated population in 1903.

The following table shows the estimated population and the number of males and females in each ward of the borough :—

Ward.	Males.	Females	Totals.
Moorside... ..	6620	7922	14542
East	5506	6357	11863
Church... ..	3495	3771	7266
Redvales	4826	5854	10680
Elton... ..	6660	7439	14099
Totals	27107	31343	58450

BIRTHS.

During the year 1,383 births have been registered within the Borough, of which 688 were boys and 695 were girls. This gives a birth rate of 23.66 per 1,000, as compared with 1,329 births and a rate of 22.79 per 1,000 for the year 1903. The number of births in the Borough, which shows an increase of 54 during the year 1904 over the preceding year, is fairly satisfactory, inasmuch as it shows an upward tendency; but at the same time the birth rate of Bury, which is 4.3 per 1,000 below the rate for England and Wales, and 5.6 lower than the average for the 76 great towns, compares very unfavourably with the rate of such Lancashire towns as St. Helens, 37.33 per 1,000; Wigan, 34.59 per 1,000; Warrington, 32.7 per 1,000; and Preston, 28.26 per 1,000 respectively.

WARD DISTRIBUTION.

	NO. OF BIRTHS.	RATE PER 1,000
Moorside	340	23.38
East	309	26.05
Church... ..	184	25.31
Redvales... ..	218	20.41
Elton	332	23.55

54 of the above births were illegitimate, as compared with 67 in the previous year, being apportioned to the following wards :—

Moorside	8
East	17 (9 of which occurred in the Union Workhouse).
Church	16
Redvales	3
Elton... ..	10
Total	54

DEATHS IN BURY.

During the year 1,104 deaths have been recorded in the Borough, being eleven fewer than in the previous year. Of these deaths 169 occurred in the Union Workhouse, 53 in the Infirmary, 21 in the Florence Nightingale Hospital, and four in the Robinson Kay Home.

Of the deaths occurring in Public Institutions, 119 were of persons usually not resident in the Borough, 31 being from Radcliffe, 27 from Heywood, 17 from Ramsbottom, 13 from Tottington, 12 from Whitefield, 9 from Bury Rural, 3 from Manchester, and one each from Blackburn, Little Lever, Haslingden, Ringley, Rochdale, Oldham, and Staffordshire respectively.

By excluding the deaths of these 119 non-residents, the total deaths are reduced to 985, to which must be added the deaths of 18 Bury residents in other districts, seven of which have occurred in the Prestwich Asylum, seven in the Manchester Hospitals, two in Isolation Hospital at Ainsworth, and two at Blackpool. Thus the corrected number of deaths of Bury residents is brought to 1,003, which is fewer by 27 than in the preceding year. The death rate being equal to 17.16 per 1,000 of the population, as compared with 17.66 per 1,000 in the previous year, and is 1.74 per 1,000 below the mean of the preceding ten years.

The following table shows the natural increase of the population, *i.e.*, the excess of births over deaths during the past 14 years (1891-1904):—

Year.	Births.	Deaths.	Natural Increase.
1891	1682	1474	208
1892	1617	1202	415
1893	1488	1287	201
1894	1507	1077	430
1895	1710	1414	296
1896	1454	1162	292
1897	1520	1099	421
1898	1483	1057	426
1899	1439	1061	378
1900	1390	1108	282
1901	1272	975	297
1902	1214	955	259
1903	1329	1030	299
1904	1383	1003	380
Total.....	20488	15904	4584

MARRIAGES.

The total number of marriages celebrated in the Bury Union during the year 1904 was 1,223, being a decrease of 18 as compared with the preceding year. The quarterly return of the marriages solemnized in the Bury District in the year 1904 is summarised as follows :—

Quarter.	Church of England	Before Authorised Persons.	Before Registrars.	Totals.
March Quarter, 1904... ..	126	15	101	242
June Quarter, 1904	225	28	100	353
September Quarter, 1904... ..	189	33	122	344
December Quarter, 1904... ..	166	18	100	284
Totals	706	94	423	1223

District Mortality Rates.—The following table shows clearly the difference as regards the mortality rates in the various Wards :—

POPULATION, ACREAGE, AND DEATH RATES IN THE
VARIOUS WARDS.

WARD.	Estim'ted Popula- tion to middle of 1904.	Acreage.	Persons per Acre.	Total Deaths	*Death Rate per 1000.	Mortality per 1000 Living.				
						Zymotic Diseases.	Phthisis.	Other Tubercular Diseases.	Other Respiratory Diseases.	Cancer.
Moorside	14542	1534	9.42	223	15.33	1.93	1.32	0.68	3.10	1.03
East.....	11863	786	15.0	211	17.79	3.29	1.94	0.84	3.20	0.51
Church	7266	253	28.53	188	25.87	3.58	3.30	0.69	4.54	0.82
Redvales	10680	1221	8.69	142	13.29	1.69	0.94	0.65	2.25	0.93
Elton ..	14099	2042	6.86	239	16.95	2.84	1.49	0.57	2.25	0.28
Totals	58450	5836	9.95	1003	17.16	2.58	1.66	0.68	3.11	0.70

*Deaths occurring in Institutions have been relegated to the Wards to which they belonged; deaths within the Borough of persons usually resident outside are here excluded, and correction is made for persons dying without the Borough, but usually resident within. It will be observed from the above table that the highest death rate is recorded in Church Ward, which is the most densely populated district.

Causes of, and Ages at, Death, during Year 1904.

Causes of Death.	Deaths in or belonging to whole District at subjoined ages.							Deaths in or belonging to localities (at all ages).			Total Deaths in Public Institutions in the District.
	All ages.	Under 1 year	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Registration Sub-Districts.			
								North	South	Elton	
Smallpox.....	2	..	..	..	..	2	..	..	2	..	..
Measles	27	8	19	..	..	..	..	11	9	7	4
Scarlet Fever.....	10	..	4	5	..	1	..	5	3	2	13
Whooping Cough	42	18	24	..	..	..	..	21	11	10	1
Diphtheria and Membranous Croup.....	7	..	5	2	..	..	..	1	..	6	3
Croup	..	..	..	..	..	..	..	..	..	..	..
Fever { Typhus.....	..	..	..	..	..	..	..	..	..	..	..
Enteric	7	..	..	2	1	4	..	3	1	3	6
Other continued..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	11	..	..	..	1	7	3	3	8	..	3
Cholera	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	45	36	6	..	..	2	1	23	10	12	2
Enteritis	1	1	..	..	..	..	..	..	1	..	..
Puerperal Fever	3	..	..	..	1	2	..	..	3	..	1
Erysipelas	..	..	..	..	..	..	..	..	..	..	1
Other Septic Diseases	..	..	..	..	..	..	..	..	..	..	..
Phthisis	97	2	2	6	11	73	3	42	34	21	19
Other Tubercular Diseases	40	14	12	7	2	5	..	20	12	8	7
Cancer, Malignant Disease	41	..	..	..	..	35	6	21	18	2	13
Bronchitis	118	23	14	4	1	37	39	55	36	27	15
Pneumonia.....	56	14	9	1	4	22	6	28	16	12	5
Pleurisy	1	..	..	..	..	1	..	..	1	..	1
Other Diseases of Respiratory Organs	7	..	3	..	1	3	..	..	4	3	..
Alcoholism	..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver }	8	..	..	..	..	6	2	2	6	..	3
Venereal Diseases.....	9	9	..	..	..	..	..	5	3	1	2
Premature Birth	26	26	..	..	..	..	..	12	4	10	..
Diseases and Accidents of Parturition	5	1	..	..	3	1	..	4	1	..	..
Heart Diseases	88	1	2	4	4	50	27	32	37	19	18
Accidents	24	..	6	3	1	11	3	12	4	8	24
Suicides	6	..	..	..	1	4	1	3	3	..	2
Brain, Diseases of.....	37	4	3	2	4	16	8	16	10	11	29
Apoplexy.....	34	..	..	..	1	19	14	14	15	5	10
Spinal Cord, Disease of ..	4	..	..	..	..	3	1	..	2	2	2
Digestive Organs, Diseases of	23	8	1	..	2	9	3	7	7	9	7
Old Age	73	..	..	..	..	2	71	28	21	24	37
All other causes.....	151	61	15	3	9	50	13	66	48	37	20
All causes.....	1003	226	125	39	47	365	201	434	330	239	248

Vital Statistics of Whole District during 1904 and Previous Years.

YEAR	Population estimated to middle of each Year.	Births.		Total Deaths Registered in the District.				Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.		
				Under 1 Year of Age.		At all Ages.						
		Number.	Rate	Number	Rate per 1000 Births Registr'd	Number	Rate					
1894	...	57476	1507	27.95	223	147	1140	19.38	139	63	1077	18.72
1895	...	57558	1710	29.88	338	197	1501	26.19	196	94	1414	24.56
1896	...	57639	1454	25.22	257	176	1245	21.59	164	83	1162	20.15
1897	...	57721	1520	26.33	270	177	1183	20.49	166	84	1099	19.03
1898	...	57804	1483	25.65	275	185	1128	19.51	150	71	1057	18.28
1899	...	57885	1439	24.85	233	161	1163	20.09	194	109	1061	18.29
1900	...	57966	1390	23.97	233	167	1199	20.68	210	107	1108	19.11
1901	...	58049	1272	21.91	213	166	1060	18.26	204	94	975	16.79
1902	...	58182	1214	20.86	156	128	1011	17.37	193	80	955	16.41
1903	...	58313	1329	22.79	231	174	1115	19.12	224	105	1030	17.66
Averages for years 1894-1903.		57859	1431	24.94	243	168	1174	20.26	184	89	1093	18.90
1904	...	58450	1383	23.66	226	163	1104	18.88	148	119	1003	17.16

Area of District in acres (exclusive of area covered by water) 5836.

Total population at all ages 58029

Number of inhabited houses 12695

Average number of persons per house... 4.57

At Census of 1901.

Vital Statistics of separate Localities in 1904 and previous years.

YEAR.	BURY (whole district).				SUB-REGISTRATION DISTRICTS.											
					NORTH.				SOUTH.				ELTON.			
	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all ages.	Deaths under 1 year.
1894	57476	1507	1077	223	26231	680	527	89	17693	476	318	85	13552	351	232	49
1895	57558	1710	1414	338	26230	765	659	145	17711	527	430	120	13617	418	325	73
1896	57639	1454	1162	257	26229	652	583	114	17729	486	344	85	13681	316	235	58
1897	57721	1520	1099	270	26228	685	529	134	17747	477	333	80	13746	358	237	56
1898	57804	1483	1057	275	26227	696	519	118	17766	454	324	88	13811	343	214	69
1899	57885	1439	1061	233	26226	650	538	116	17784	425	299	72	13875	364	224	45
1900	57966	1390	1108	233	26225	655	594	107	17802	415	305	66	13939	320	209	60
1901	58049	1272	975	213	26224	580	470	99	17821	369	285	56	14004	323	212	58
1902	58182	1214	955	156	26290	560	425	70	17859	356	300	46	14033	298	230	40
1903	58313	1329	1030	231	26348	617	449	101	17901	402	320	74	14064	310	261	56
Averages of Years 1894 to 1903				243	26246	654	529	109	17781	437	326	77	13832	340	238	57
1904	58450	1383	1003	226	26405	688	434	111	17946	402	330	66	14099	332	239	49

CLASSIFICATION OF THE CAUSES OF DEATH.

Of the 1,003 deaths from all causes :—

Zymotic Diseases caused 141 deaths or 14.05 per cent.

Constitutional	„	201	„	20.04	„
Developmental	„	116	„	11.56	„
Local	„	449	„	44.77	„
Other	„	96	„	9.58	„

Mortality at Different Ages.—Of the 1,003 deaths :—

226	occurred in children under one year of age.....	22.53	per cent.
125	occurred between the ages of 1 and 5 years.....	12.46	„
39	„ „ 5 and 15 years.....	3.89	„
47	„ „ 15 and 25 years.....	4.69	„
365	„ „ 25 and 65 years.....	36.39	„
201	occurred in persons over 65 years of age	20.04	„
		100.00	

Zymotic Diseases.—The percentage of deaths from zymotic diseases (14.05) during the year compares very unfavourably with the years 1903, 1902, and 1901, when the percentages of deaths were 12.04, 9.95, and 10.87 respectively. This high mortality is attributed chiefly to the large number of deaths (42) which were recorded from Whooping Cough, 38 of which deaths occurred in the first half of the year; Measles being responsible for 27, and Diarrhoea 45 deaths respectively. Two deaths have also been recorded from Smallpox.

Diseases of the Respiratory Organs (excluding Phthisis). 182 deaths have been attributed to various diseases of the respiratory organs, which is a decrease of 22 in the number of deaths, as compared with the preceding year. Of these deaths, 118, or 64.83 per cent. of the total deaths from respiratory diseases, were attributed to Bronchitis, of which 23 occurred in children under one year of age. The following table shows the age period at which deaths from Bronchitis were recorded :—

Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 upwards
23	14	4	1	37	39

Pneumonia caused 56 deaths, as compared with 93 in the previous year. The following table shows the ward distribution and the age periods at which these deaths were recorded :—

Wards.	Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and Upwards	Totals.
Moorside	1	3	...	2	5	3	14
East	4	4	...	...	5	1	14
Church	3	...	...	...	2	2	7
Redvales	3	...	...	...	6	...	9
Elton.....	3	2	1	2	4	...	12
Totals.....	14	9	1	4	22	6	56

LONGEVITY.

Deaths of Persons over 60 Years of Age.—The deaths of persons over 60 years of age were equal to 28.61 per cent. of the total deaths, which compares very favourably with the preceding year, when the percentage of deaths of persons over 60 years of age was 28.54.

The number of deaths attributed to **Old Age** was 73, which is not so high as in former years, as will be seen from a reference to the following table :—

YEAR.	1897	1898	1899	1900	1901	1902	1903	1904
No. of Deaths	98	78	81	112	109	74	79	73
Per cent. of Total Deaths	8.28	6.91	6.96	9.34	10.21	7.64	7.67	7.27

INQUESTS DURING THE YEAR 1904.

During the year the cause of death of 61 Bury residents were investigated by the District Coroner, Mr. S. F. Butcher. In 44 instances it was found advisable to hold an inquest, and in 17 cases an inquiry was dispensed with. Of this number 34 related to the bodies of males and 27 to females. The following is a classification of the sex and age periods :—

	Males	Females
Under one year of age	6	3
Over one and under five years of age... ..	3	6
Over 5 and under 15 years of age... ..	3	—
Over 15 and under 25 years of age	1	1
Over 25 and under 65 years of age	15	10
Over 65 years	6	7
	—	—
Totals	34	27

In the 44 cases in which inquests were held the findings of the Coroner's Juries were as follows :—

Natural Causes	10
Accidents	24
Suicide	6
Doubtful... ..	4

Of the six deaths from suicide (two males and four females), three committed suicide by taking poison, two by cutting their throats, and one by drowning.

UNCERTIFIED DEATHS.

The number of uncertified deaths, *i.e.*, deaths which have not been certified by a Medical Man, or cases in which the Coroner deems the holding of an inquest unnecessary, was 17, ten being males and seven females.

The following are the age periods :—

Under one year of age... ..	2
Over one and under five years of age... ..	3
Over five and under 25 years of age... ..	—
Over 25 and under 65 years of age	5
Over 65 years of age	7
	—
	17
	—

Annual Rate of Mortality compared with other Towns.

The following table compares the Birth Rate and certain Death Rates of Bury with other manufacturing towns and with the returns for England and Wales.

TOWN.	Estimated Population.	Birth Rate per 1000.	Death Rate per 1000.		Zymotic Death Rate.	Proportion of Deaths of Infants under twelve months to 1000 Births.
			Crude.	Correct'd.*		
Accrington ...	44300	22·64	...	15·77	1·46	148
Crewe	46065	30·9	14·3	14·5	2·04	160
Oldham	139497	24·9	...	18·3	2·3	155
Preston	115055	28·2	...	17·8	3·0	183
Wigan.	64249	34·59	23·78	21·49	3·14	188
Bolton	175744	26·9	16·9	19·12	2·25	167
Bury	58450	23·66	18·87	17·14	2·30	163
Rochdale ...	85600	22·8	16·1	17·7	2·07	152
Stockport ...	97008	26·63	21·72	21·56	3·29	201
Radcliffe.....	25500	24·2	...	19·6	2·9	197
Warrington .	68490	32·7	19·4	21·0	4·6	170
St. Helen's...	88740	37·33	20·39	22·10	3·96	174
Blackburn ...	131908	23·5	17·2	19·4	2·4	191
Leeds	450142	28·0	18·0	17·92	2·59	176
Burnley	98500	27·25	20·9	20·0	3·83	232
Darwen	39516	20·7	15·1	15·2	2·7	150
Bootle	62000	30·9	18·6	20·5	3·6	180
London	4648950	28·0	...	16·10	2·1	144
England & Wales }	33763434	27·9	...	16·2	1·94	146

* For Non-Residents.

INFANTILE MORTALITY.

Number of births during the year 1904... ..	1383
Number of deaths in children under 1 year of age...	226
Infantile Mortality	163.4 per 1,000 births.

The Infantile Mortality for the year 1904 is distinctly unsatisfactory. Though lower than that of 1903, and of the average for the preceding ten years (166), it is still much too high.

As compared with 1903, a slight decrease is found in the number of deaths from Diarrhœa (32 in 1904, and 38 in 1903), in spite of the fact that the climatic conditions were less favourable for the checking of the disease, being warm and dry. There is also a decrease in the deaths from Premature Birth (26 as compared with 35 in 1903).

But we find a marked increase in the mortality from Whooping Cough (18 as compared with four in 1903), in spite of the fact that the year has been neither wet nor cold, the conditions which most favour an increased Whooping Cough mortality. The comparison of the deaths respectively for the past ten years in the Borough, and also those for England and Wales, will be seen in the subjoined table:—

Infantile Mortality of Bury:—

1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
197	176	177	173	161	167	166	128	174	163

Infantile Mortality for the whole of England and

Wales (1904)	146
For the 76 great towns... ..	160
For the 142 smaller towns... ..	154
For the rest of England and Wales... ..	125
For London	144

CAUSES OF DEATH.—**Zymotic Diseases** have caused 59 deaths, of which eight were due to Measles, 18 to Whooping Cough, one to Diphtheria, and 32 to Diarrhœa, as compared with 38 deaths during the previous year. The most unsatisfactory feature is the

large number of deaths again recorded of children under one year of age from Diarrhœa (32), as compared with seven deaths during the year 1902 and 38 during 1903.

The Respiratory Diseases.—These were responsible for 40 deaths, 24 of which were due to Bronchitis, 14 to Pneumonia, and two to other respiratory diseases.

The chief remaining causes were :—

Premature Birth... ..	26 deaths.
Malformation & Congenital Defects ...	9 „
Marasmus, Tabes Mesenterica, &c. ...	39 „
Hereditary Diseases	9 „
Tubercular Diseases	9 „
Convulsions and Nervous Diseases ...	19 „
Dentition... ..	3 „

An analysis of the deaths at the various age periods is given on page 24.

Inquests.—During the year the Coroner (Mr. S. F. Butcher) has enquired into the cause of death in nine instances (six males and three females), the age of the children being forty minutes, one hour, five days, 27 days, one month, three months, four months, seven months, and eight months respectively. In six cases the cause of death was returned as “Natural Causes,” in one case the cause of death was due to an accident, and in the other two cases the cause of death was “Doubtful.”

Illegitimacy.—It is again satisfactory to record that of 226 deaths, only ten, or 4.2 per cent., were of illegitimate children.

During the year the Inspectors (Nurses Ravenshaw and Walton) have been able to obtain particulars in 199, or 88 per cent., of the 226 deaths registered as regards the feeding of the infants, and also as to the occupations of the mothers, which are as follows :—

Feeding.—No fewer than 160 or 80.40 per cent. of the total cases were bottle fed, while only 33, or 16.58 per cent., were

fed naturally. In the remaining cases (27) the character of the feeding was not obtained, this number including those prematurely born who died shortly after birth, and the births which have occurred in public institutions.

Occupation of Mother.—In the majority of cases the mother was occupied at home (128). In 71 instances the mother was at work (chiefly in the mill).

Insurance.—One hundred and twenty-one of the children (58.33 per cent.) were insured.

Influence of Feeding on Infant Mortality.—During the year the Female Inspectors have obtained information as to the method of feeding in 1,268 instances, or 91.68 per cent. of the 1,383 births registered during 1904. In 834 cases, or 65.77 per cent., the children were breast fed, and 434 instances, or 34.23 per cent., the children were bottle-fed.

Of the 1,268 cases investigated, 187 died before the end of the year, 26 of this number were premature births, and of the remaining 161, 139 deaths occurred in bottle-fed children, and 22 in children fed naturally.

Number of Births.	Number of instances in which information was obtained.	Nature of Feeding.	Number of Deaths.	Mortality Percentage.
1383	... 1268	{ 834 Breast	22	2.64
		{ 434 Bottle	139	32.03

An Analysis of the Deaths of Infants under One Year of Age.—1904.

CAUSES OF DEATH.	1st day.	2nd day.	3rd day.	4th day.	5th day.	6th day.	7th day.	2nd week.	3rd week.	4th week.	1 month & under 2.	2 months & under 3.	3 months & under 4.	4 months & under 5.	5 months & under 6.	6 months & under 7.	7 months & under 8.	8 months & under 9.	9 months & under 10.	10 months & under 11.	11 months & under 12.	TOTAL.
Premature Birth, malformation, and congenital defects	13	3	1	1	1	..	..	3	1	..	2	1	..	..	..	..	..	..	..	..	..	26
Marasmus, tabes mesenterica, atrophy, debility, and malnutrition	1	..	..	..	..	..	..	1	1	..	6	12	4	2	2	2	4	1	1	1	1	39
Tubercular disease, tubercular meningitis and hydrocephalus.....	..	..	..	..	..	..	..	..	1	1	..	1	..	3	..	1	1	..	..	1	..	9
Malformation and Congenital Defects ..	3	..	..	..	..	..	..	1	..	2	..	1	2	..	..	..	..	..	..	..	..	9
Convulsions and Nervous Diseases	2	..	2	1	..	..	..	2	2	..	2	..	1	3	3	..	..	..	..	..	1	19
Diseases of the Respiratory System....	1	..	..	..	..	..	..	1	3	..	4	..	1	3	4	1	3	4	5	4	6	40
Dentition	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	3
ZYMOTIC DISEASES. {Diarrhoea	..	..	..	..	..	..	..	..	..	..	3	3	7	5	2	3	2	..	2	3	2	32
{Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
{Measles	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	1	1	1	2	8
{Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{Whooping Cough	..	..	..	..	..	..	..	..	1	..	3	2	1	3	..	..	2	1	..	1	4	18
All other causes	4	..	..	..	..	1	..	2	2	1	3	1	2	..	2	1	..	2	..	..	1	22
TOTALS.....	24	3	3	2	1	1	—	10	11	4	24	21	19	19	14	9	12	9	9	12	19	226

NOTIFICATION OF INFECTIOUS DISEASES.

Table showing the number of cases of Infectious Diseases notified from 1884 to 1904.

DISEASE.	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Smallpox	3	1	4	14	5	..	..	..	..	12	28	..	1	..	..	..	5	..	37	59	25
Scarlet Fever	115	171	114	183	92	42	98	255	272	359	449	160	365	262	148	236	432	179	156	156	261
Diphtheria	7	6	2	8	7	20	22	34	36	34	42	32	27	23	22	40	14	76	177	98	68
Membranous Croup †	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	5	4	2	5	9	5
Enteric Fever	84	30	19	17	21	18	36	88	41	76	76	70	41	59	55	45	40	47	33	37	22
Continued Fever....	10	7	2	..	..	1	..	1	..	9	30	8	8	13	15	12	11	9	5	2	1
Typhus Fever	3	1	1	..	1	1	..	..	2	..	10	..	..	..	1	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever.....	..	..	..	..	..	..	2	5	3	4	13	4	2	5	6	8	15	7	11	2	11
Measles§.....	108	1	26	78	499	22	27	360	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough§....	17	..	..	15	19	179	63	45	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas†.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	15	20	20	10
TOTALS... ..	347	217	168	315	644	283	248	788	354	494	648	274	444	366	250	346	555	335	444	383	403

§ Not notifiable after 1891. † Made notifiable on June 25th, 1897. ‡ Made notifiable on January 1st, 1900.

Cases of Infectious Disease notified during the Year 1904.

Notifiable Disease.	Cases notified in whole District.							Total cases notified in each locality.			No. of Cases Removed to Hospital from each locality.		
	At all Ages	At Ages—Years.						Registration Sub-District.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and up-wards.	North.	South.	Elton	North.	South.	Elton.
Smallpox	25	..	..	4	5	16	..	8	16	1	8	16	1
Cholera	68	..	23	31	7	7	..	21	18	29	8	5	14
Diphtheria	5	..	4	1	..	..	..	..	..	5	..	..	..
Membranous Croup ..	10	..	..	..	1	8	1	6	2	2	..	..	..
Erysipelas	261	1	72	159	19	10	..	104	86	71	72	55	42
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever	22	..	..	5	7	10	..	11	2	9	3	..	3
Enteric Fever.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever....	1	..	..	1	..	..	..	..	..	1	..	..	1
Continued Fever ..	11	..	..	..	1	10	..	3	6	2	..	2	..
Puerperal Fever.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS.	403	1	99	201	38	61	1	153	130	120	91	78	61

NUMBER OF CASES OF INFECTIOUS DISEASES REPORTED IN EACH MONTH OF THE YEAR.

	Scarlet Fever.	Diphtheria.	Membranous Croup	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.	Smallpox.
January	15	5	1	2	...	1	1	...
February	28	4	3	2	...	1	1	...
March	27	5	...	1	...	2	...	...
April	26	3	...	...	...	...	2	3
May	30	3	...	1	...	2	...	...
June	15	4	...	...	...	1	3	6
July	21	6	1	1	...	..	1	10
August	17	3	...	4	...	1	...	1
September ...	17	1	...	3	...	1	...	2
October	26	9	...	4	...	1	1	3
November ...	18	12	...	2	...	1	...	...
December ...	21	13	...	2	1	...	1	...
TOTALS.....	261	68	5	22	1	11	10	25

NUMBER OF CASES OF INFECTIOUS DISEASES NOTIFIED IN EACH
QUARTER OF THE YEAR 1904.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox.
QUARTER.								
1st	70	14	4	5	...	4	2	...
2nd	71	10	0	1	...	3	5	9
3rd	55	10	1	8	...	2	1	13
4th	65	34	0	8	1	2	2	3
TOTALS.....	261	68	5	22	1	11	10	25

WARD DISTRIBUTION OF INFECTIOUS DISEASES, 1904.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox.
Moorside	56	11	...	6	...	3	5	1
East.....	48	10	...	5	...	...	1	7
Church	29	2	...	...	...	2	...	15
Redvales.....	57	16	...	2	...	4	2	1
Elton	71	29	5	9	1	2	2	1
TOTALS.....	261	68	5	22	1	11	10	25

CASES REMOVED TO THE FLORENCE NIGHTINGALE HOSPITAL FROM
THE VARIOUS WARDS.

	Scarlet Fever.	Diph- theria.	Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	* Smallpox.
Moorside	36	4	...	...	...	...	...	1
East.....	36	4	...	...	...	...	...	7
Church.....	19	...	...	...	...	1	...	15
Redvales	36	5	...	...	...	1	...	1
Elton	42	14	...	...	1	...	...	1
TOTALS.....	169	27	...	...	1	2	...	25

*Removed to the Isolation Hospital, Ainsworth.

SCARLET FEVER.

RATE OF MORTALITY DURING THE PAST TEN YEARS.

Year	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904.				
										England & Wales	London	76 Great Towns	142 Smaller Towns	Bury
Death Rate per 1000 Living	0·11	0·28	0·26	0·14	0·08	0·09	0·05	0·09	0·13	0·11	0·08	0·12	0·13	0·17

Cases notified during the Year 1904 261

Cases notified during the Year 1903 156

Being an increase over the preceding year of 105

Ten deaths have been recorded, representing a rate of 0.17 per 1,000, an increase of 0.03 over the average for the last ten years.

QUARTERLY INCIDENCE.

1904.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.
Notifications ...	70	.....	71	.....	55	.....	65	.....	261
Deaths	3	.....	5	.....	1	.....	1	.....	10

The ward distribution is shown on the previous page. As in the preceding year, the maximum number of cases occurred in Elton Ward, and the minimum in Church Ward.

TABLE SHOWING AGE DISTRIBUTION.

	All Ages.	Under 1 year.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 upwards
Cases	261	1	72	159	19	10	0
Deaths... ..	10	0	4	5	0	1	0

SCHOOL CLOSURE.—Bircle National School had to be closed from March 24th till April 1st, owing to an outbreak of Scarlet Fever among the scholars throughout the school. (See report on School Closure.)

In 18 instances there were two cases of Fever in one house.

In three instances there were three cases in one house.

In one instance there were four cases in one house.

In one instance there were five cases in one house.

The remaining 207 cases were all in separate houses.

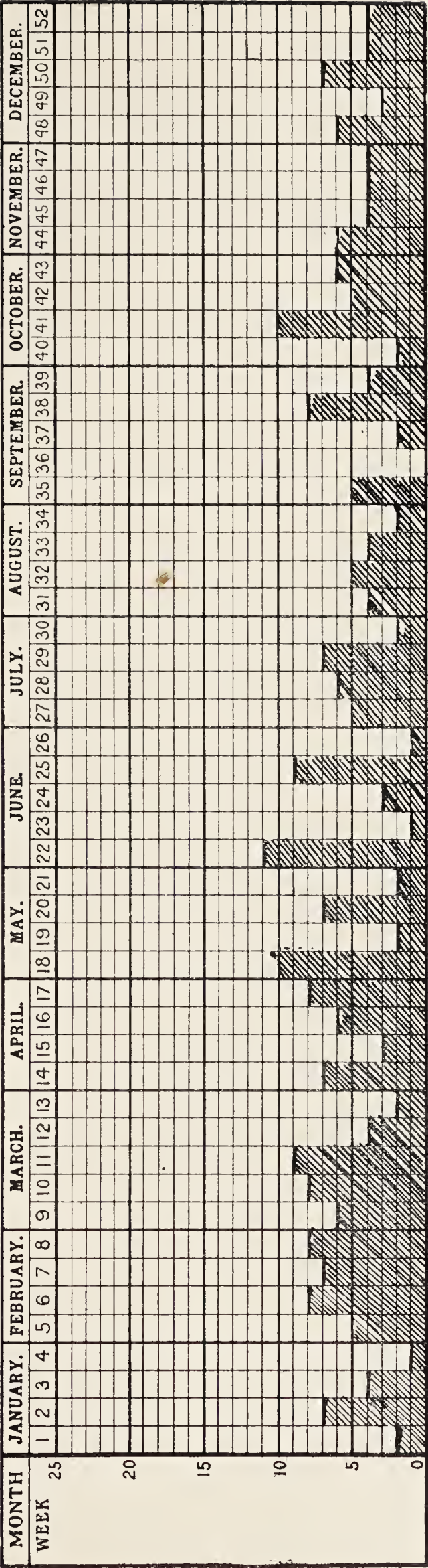
ADMISSIONS TO HOSPITAL.—Of the total notifications (261), there were admitted to the Florence Nightingale Hospital 169 cases, *i.e.*, 64.75 per cent., an increase of rather more than two per cent. on the preceding year. Of the 169 hospital cases, six died, representing a case mortality of 3.55 per cent., whereas of the 92 cases treated at home four died, their case mortality being 4.35 per cent. This comparison is particularly satisfactory when one takes into consideration the fact that quite a large proportion of the hospital cases are admitted suffering from a severe type of the disease. In addition, a special feature of the cases this year (1904) was the unusually large proportion which were found to be suffering on admission from throat complications of a highly virulent nature, more especially during the latter half of the year.

RETURN CASES.—Only three cases call for remark under this head:—

- (i.) J. S., discharged on 16th April, F. S. and W. B. notified from the same house on 20th April.
- (ii.) H. B., discharged on 16th May, experienced a relapse after returning home, and was re-admitted with her sister, E. B., on 24th May.
- (iii.) H. E., returned from hospital on 23rd January, sister, S. E., notified February 3rd, and treated at home.

It is only possible as a rule to determine return cases which result from infection by patients discharged from hospital; when patients are treated at home the isolation is often less strict than in hospital, and infection of other members of the family frequently occurs during the period of “isolation,” if this be not well maintained. Such cases are apt to be put down as due to the same cause which infected the first member of the family, instead of often being really of the nature of “returns.”

Chart showing the Number of Cases of Scarlet Fever Notified during each Week of the Year 1904.



“ RETURN ” CASES FROM CASES OF SCARLET FEVER TREATED
AT HOME.

- (i.) S. E., notified 3rd February, M. S. (cousin), notified 20th April, the source of infection being definitely proved.
- (ii.) C. C., notified 14th November, E. C. (sister), notified 4th January, 1905. The latter had been sent away to Stockport, and “ failed ” with Scarlet Fever four days after her return home.
- (iii.) F. K., notified March 3rd, R. K. (brother) notified May 7th.

As bearing on the question of “ Return ” cases, it should be borne in mind that in a considerable proportion of cases treated at home the patient is an only child, and, therefore, a “ Return ” case is practically impossible, the patient being the only susceptible member of the household.

The appended table brings this out very clearly, showing that where the notified case is an only child it is kept at home in 65 per cent. of the cases. Conversely the table shows that the *percentage of removals to hospital increases with the number in the household.*

CASES TREATED, 1904.

Of families consisting of.	HOME.			HOSPITAL.	
	Number.	Per cent.		Number.	Per cent.
One Child	28	65	.....	15	35
Two Children... ..	17	37	.....	29	63
Three Children	19	43	.....	27	57
Four Children	6	19	.....	25	81
Five Children	4	25	.....	12	75
Six Children... ..	2	18	.....	9	82
Seven Children	0	0	.....	5	100
Eight Children or more ...	1	9	.....	10	99

The past year has been one which, owing to its climatic conditions, has been particularly favourable to the increase and spread of Scarlet Fever. A long, dry period, following on one or more wet years has always been found to be accompanied by a high case incidence, and 1904 has really been less severe in this respect than might have been expected. Thirteen cases were notified by teachers at the various schools in the district.

ENTERIC FEVER.

RATE OF MORTALITY FROM ENTERIC FEVER FOR THE LAST
TEN YEARS.

Year.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904.				
										England and Wales.	London.	76 Great Towns.	142 Smaller Towns.	Bury.
Death Rate per 1000 living.	0·23	0·18	0·24	0·24	0·24	0·09	0·12	0·07	0·07	0·09	0·06	0·10	0·10	0·12

Notifications of 22 cases of Enteric Fever were received at the Health Office during the year, and of these six cases, or 27·27 per cent., were removed to the Florence Nightingale Hospital. There were seven deaths in all, of which five had been treated at home, and two in hospital.

The MONTHLY INCIDENCE was as follows :—

1904.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Total	
Notifications	...	2	2	1	0	1	0	1	4	3	4	2	2	22
Deaths...	...	0	1	0	0	0	0	1	0	2	1	2		7

AGE DISTRIBUTION.

	AGES—Under 1.													1 to 5.	5 to 15.	15 to 25.	25 to 65.	Over 65.	All Ages
Notifications	..	0	...	0	...	0	...	5	...	7	...	10	...	0	...	22			
Deaths	...	...	...	0	...	0	...	2	...	1	...	4	...	0	...	7			

WARD DISTRIBUTION.

	Moorside.													East.	Church.	Redvales.	Elton.	Total.
Notifications	...	...	...	6	...	5	...	0	...	2	...	9	...	22				
Deaths	...	...	...	...	1	...	2	...	0	...	1	...	3	...	7			

SEX INCIDENCE.—Of the notified cases eight were males and fourteen were females, and of the fatal cases two were males and five were females.

SANITARY CONDITION OF INFECTED HOUSES.—The general sanitary conditions are summarised in the tables on pages 34 and 35. From these tables it will be seen that of the twenty houses infected

- 12 were provided with privy middens,
- 3 with pail closets,
- 2 with waste water closets,
- 2 with water closets.
- 1 with earth closets (Wellington Barracks).

BACTERIOLOGICAL TESTS.—Specimens of blood from sixteen cases of suspected Typhoid Fever were sent to the Public Health Laboratories, Manchester, with the following results :—

Five gave a positive result to Widal's test.

Nine gave a negative result.

Two gave an "incomplete" reaction.

WATER SUPPLY.—In all cases the supply was directly from the public service, but in one instance the public supply was laid on to a galvanized iron cistern which supplied the water for domestic purposes.

MILK SUPPLY.—No instance of infection by this channel was discovered.

PREVENTIVE MEASURES.—These, for some years now, have consisted generally in (i.) Isolation (a) at home (b) in hospital. (ii.) Disinfection or destruction of stools. In the case of patients treated at home special pails are supplied by the Health Department for the reception of the excreta of patients. The pails are removed frequently, and their contents burnt at the destructor. (iii.) Thorough disinfection of house, bedding, &c. (iv.) Disinfection of sanitary conveniences attached to the infected houses. (v.) Examination of drains, and defects, if any, remedied. (vi.) Conversion of midden ashpits, where these exist in connection with infected houses, to the water carriage system. This last remedy is, in my opinion, a most important one in the prevention of the future spread of the disease.

CASES OF ENTERIC FEVER.

No.	Age.	Cases in same house or vicinity.	Nature of Closet Accommodation.	Condition of			REMARKS.
				Yard.	Drains.	Closet or Ashpit.	
1 } 2 } 3 }	10 8 16	.....	P. & A.	Good order, part cobbled.	Good on surface.	Cleared monthly	Disused slaughter-house close to house.
4	30	.....	P. & A.	Defective pavement.	Defective.	Cleared every 8 weeks.	Drains bad; waste pipe broken.
5	21	.....	P. & A.	Good, common to two houses	Good on surface.	Cleared weekly.	Parturition 18 days previous.
6	34	.....	P. & A.	Good, flagged.	Good.	Cleared every 8 weeks.	Stables 30 yards away.
7	21	.....	P. & A.	Good, common to four houses.	Good.	Cleared every 2 months.	Patient had only resided in house a fortnight; drains belonging to previous residence were found to be defective.
8	12	.....	P. & A.	Defective.	Defective.	Cleared every 2 months.	Small Sweet Shop.
9	16	.....	W.C.	Open, in good order.	Good on surface.	Cleared about every 2 months.	Horse and poultry kept in yard; sewer manhole 12 yards away.
10	5	.....	W.W.C.	Good, part flagged.	Good on surface.	Cleared monthly	W. W.C. choked; back street not paved.
11	31	.....	Pail.	Good.	Good on surface.	Cleared daily.	Single galvanised water-cistern supplies all purposes; direct communication between house and pail closet.
12	19	.....	P. & A.	Pavem't defective	Good on surface.	Cleared monthly	.....
13	...	.....	Earth Closet	.....	.....	.....	Militia Barracks.
14	52	.....	P. & A.	Good, flagged.	Good on surface.	Cleared every 8 weeks.	Privy midden two yards from house.
			P. & A.	Good, flagged.	Good on surface.	Cleared monthly	Mill reservoirs in near vicinity; walls of house damp; privy midden three yards from house.
I	2	3	4	5	6	7	8

1	2	3	4	5	6	7	8
15	27	.....	Pail.	Open, common to four houses.	Good on surface.	Cleared weekly.	Poultry kept in open yard; sewer man- hole seven yards from house.
16	10	.....	P. & A.	Open, good.	Doubtful.	Cleared about four times a year.	Contents of privy midden wet; drains from house in vicinity are not connected to a sewer, but discharge on surface of land.
17	33	.....	P. & A.	Mostly occupied by fowl houses.	Good on surface.	Cleared monthly	Contents of privy midden wet; yard much soiled by fowls; sewer man- hole seven yards from house.
18	19	.....	P. & A.	Good, flagged.	Defective.	Cleared monthly	Dilapidated and untrapped drains.
19	28	.....	W.C.	Good, flagged.	Defective.	Cleared weekly.	Bird and animal shop next door; water closet defective; drains untrapped.
22 } 20	27 30	.....	W.W.C.	Good, flagged.	Good.	Cleared weekly.	Yards at end of house used as fowl runs, stables, &c.
21	17	.....	Pail.	Open.	?	Cleared weekly.	Dilapidated building behind house.

P. & A.—Privy and Ashpit.

W.C.—Water Closet.

W.W.C.—Waste Water Closet.

DIPHThERIA AND MEMBRANOUS CROUP.

RATE OF MORTALITY FROM DIPHThERIA AND MEMBRANOUS CROUP
FOR THE LAST TEN YEARS.

Year	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904.				
										England and Wales.	London	76 Great Towns.	142 Smaller Towns.	Bury.
Death Rate per 1000 Living.	0·22	0·16	0·11	0·06	0·18	0·12	0·21	0·58	0·43	0·17	0·16	0·19	0·16	0·12

Sixty-eight cases of diphtheria and five cases of membranous croup have been notified during the year, a total of 73 cases, as compared with 107 in 1903, and 182 in 1902.

Seven deaths have been recorded, representing a mortality of 0·12 per 1,000, a decided improvement on the two preceding years.

Of the 68 cases, 27, or 39·7 per cent., were removed to the Florence Nightingale Hospital. Of these one, or 3·70 per cent., died, while of those treated at home six, or 19·36 per cent., died. As in 1903, the Elton Ward suffered most from diphtheria, but the numbers show a satisfactory reduction (from 44 to 29).

QUARTERLY INCIDENCE.

	1st.	2nd.	3rd.	4th.	Total.
Cases... ..	14	10	10	34	68
Deaths	4	0	1	2	7

WARD DISTRIBUTION.

	Moorside.	East.	Church.	Redvales.	Elton.
Cases	11	10	2	16	29
Deaths	0	1	0	0	6
Cases taken to Hospital...	4	4	0	5	14

NOTIFICATION AND DEATHS AT DIFFERENT AGES.

Age.	Under 1 year.		1 to 5 years.		5 to 15.		15 to 25.	25 to 65.	All ages.
Notified	—	23	31	7	7	—	—	—	68
Deaths	—	5	2	—	—	—	—	—	7

ANTITOXIN.—Twenty-five bottles of Antitoxin were supplied to the medical men of the district at a nominal rate, for the use of patients inside the Borough suffering from diphtheria. This arrangement confers a great boon upon both medical men and the patients themselves, especially the poorer ones, who could not in many cases afford to pay for what is almost a specific for the disease.

Before the introduction of Antitoxin into general use, the diphtheria mortality was very high, but has since fallen very markedly. In the hospitals of the Metropolitan Asylums Board, the death rate has been reduced from over 30 per cent. to 15 per cent. This latter figure would be still further reduced if cases came under treatment earlier and Antitoxin were immediately used.

BACTERIOLOGICAL EXAMINATION. — Forty-nine swabs from doubtful cases were sent for bacteriological examination, at the Public Health Laboratories, Manchester, with the following results :—

13 gave positive results for diphtheria bacilli.
36 gave negative results.



PUERPERAL FEVER.

During the year eleven cases of Puerperal Fever have been notified, with three deaths, as compared with two notifications and one death during the year 1903. Two of the cases were removed to the Florence Nightingale Hospital for treatment, one of which, however, proved fatal.

SMALLPOX.

An outbreak of Smallpox commenced in April, and continued till October 13th, on which date the last case was notified. Previous to this, the town had been free from Smallpox since October, 1903. The total number of cases notified was 25, all of which were removed to the Ainsworth Isolation Hospital.

MORTALITY.—There were two deaths, representing a case mortality of eight per cent., and a mortality of 0.03 per 1,000 of the population.

AGE AND SEX INCIDENCE.

	1 to 5.	5 to 10.	10 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 60.	60 and upwards.	All Ages.
Males	0	0	3	1	2	5	4	0	15
Females... ..	0	1	0	5	0	2	2	0	10
Totals... ..	0	1	3	6	2	7	6	0	25

MONTHLY INCIDENCE AND WARD DISTRIBUTION.

WARD.	April.	May.	June.	July.	Aug.	Sep.	Oct.	Totals
Moorside	0	0	1	0	0	0	1	2
East... ..	2	0	1	2	0	1	0	6
Church... ..	1	0	4	6	1	1	2	15
Redvales	0	0	0	1	0	0	0	1
Elton... ..	0	0	0	1	0	0	0	1

Of the 25 cases notified, two cases occurred in the Union Workhouse, one in a common lodging-house, and 22 in private houses.

VACCINATION.

Unvaccinated.	Vaccinated in infancy only.	Said to have been revaccinated.
11	13	1

Of the fatal cases, one was unvaccinated, and the other vaccinated in infancy, 38 years previously. In the latter case, however, there was only one small mark.

AGE PERIODS OF NOTIFIED CASES.

	Under 15 years.	Over 15 and under 25.	25 and upwards.	Totals.
Vaccinated in infancy... ..	0	4	10	14
Unvaccinated	4	2	5	11

It will thus be seen that no one vaccinated in infancy developed Smallpox until at least 15 years had elapsed since such vaccination was performed.

TYPE OF DISEASE.—Most of the cases were of a comparative mild type, one or two being so mild as to show only a very few spots.

Including the two fatal cases, however, there were eight cases of a severe and confluent type.

HOSPITAL ACCOMMODATION.—All the cases were treated at the Ainsworth Hospital; during the past ten years Bury Smallpox patients have been treated in four different institutions, viz. :—Florence Nightingale Hospital (old buildings), the Union Workhouse, Birtle Hospital, and recently in the Ainsworth Hospital.

THE COST OF OUTBREAKS.—These repeated outbreaks of Smallpox in the Borough (the outbreak of 1904 being the fourth within the past five years), invariably cost a considerable amount to the ratepayers. A good proportion, if not all, of this cost must be laid to the door of the anti-vaccinators, otherwise the need for a considerable proportion of expense, now incurred in the erection and maintenance of Smallpox hospitals, would be as unnecessary as it is in Germany at the present time. Fortunately the majority of the public of Bury are of the more intelligent and sensible class, although the noisy minority (anti-vaccinators) causes the greater mischief. I might reiterate my opinion, that the anti-vaccinators alone should be debited with the cost of these outbreaks, a cost which entails a rate of about $1\frac{1}{2}$ d. in the £. It is obviously unfair that those who have availed themselves of the protection of vaccination should be debited in any way for the cost of the folly and fanaticism of anti-vaccinators. Were it not that the latter are in a considerable minority in the town, Bury would ere this have doubtless shared the fate of Gloucester, Dewsbury, and Leicester (these being centres of anti-vaccination), and (like these towns) have suffered severely from visitations of Smallpox.

SMALLPOX AND VAGRANTS.

Your Medical Officer attended a Conference in November, 1904, called by the London County Council (largely at the request of the Corporation of Newcastle-on-Tyne), to consider the spread of Infectious Disease by Vagrants. The Conference was attended by representatives of the chief Sanitary Authorities in England and Wales. Many questions were dealt with which had only an indirect bearing on the spread of Smallpox by tramps, such as Labour Bureaux and Labour Colonies. The chief resolutions bearing on the spread of infectious disease (mainly Smallpox, of course), were as follows :—

- (a). That means should be provided for the detention and isolation of any vagrant found wandering in a public place, if reasonably suspected of being liable to convey infectious disease.
- (b). That Parliamentary powers should be sought for the compulsory vaccination and re-vaccination of all vagrants unable to produce proof of being sufficiently protected against Smallpox on entering casual wards or common lodging-houses, who in the opinion of the Sanitary Authority, had been exposed to the infection of Smallpox; and also that Sanitary Authorities should have power to grant such compensation as they think necessary to persons vaccinated or re-vaccinated at their request, who may be prevented on that account from working.
- (c.) That it should be an offence to withhold information or make false statements to the Sanitary Authority in carrying out its powers with respect to the disease (Smallpox).

Other resolutions were passed with reference to common lodging-houses :—

- (a.) The Local Authority should have power to medically examine the inmates, to detain and isolate persons exposed to infection, and to disinfect them and their clothes; also to temporarily close a common lodging-house, in whole or in part, compensation to be given to the keeper of the house.

- (b.) That the Local Authority should have power to order the keeper of a common lodging-house, in which there has been infectious disease, to refuse fresh admissions for such time as may be required by the Local Authority.

The question of the desirability or otherwise of having municipal common lodging-houses was not considered.

SMALLPOX AND VACCINATION.

Return showing the number of Births, Deaths (under one year), Vaccinations, Conscientious Objections, and number Unvaccinated for the year ending August 31st, 1904 :—

BOROUGH OF BURY.

	Bury North	Bury South	Elton	Totals
Births... ..	603	420	305	1368
Vaccinated... ..	384	283	214	881
Insusceptible of Vaccination... ..	1	1	2	4
Conscientious object'n certificates	73	33	32	138
Dead, Unvaccinated	64	46	40	150
Postponed by medical certificate.	10	7	9	26
Removals to districts known ...	4	8	6	18
Removals to districts unknown...	20	26	—	46
Unaccounted for... ..	47	16	42	105

Table showing percentage of Vaccination, and also comparison with the years 1903, 1902, 1901, and 1900 :—

	1904	1903	1902	1901	1900
Number of births ...	1,368	1,287	1,272	1,302	1,450
Vaccinated	64.40	57.34	66.74	49.23	49.65
Con. object'n cert's...	10.09	10.10	10.61	18.27	15.20
Unaccounted for ...	7.67	12.72	7.47	15.82	19.79

The above table compares very favourably with the previous years, although the percentage of children vaccinated is slightly smaller than that for the year 1902.

SUMMARY OF SMALLPOX CASES NOTIFIED DURING THE YEAR 1904.

Register No.	Date of Notification.	Initials.	Sex.	Age.	Address.	Source of Infection.	Particulars of Vaccination.	Termination of Case.	Remarks.
940	Apr. 10, 1904	P. R.	M.	23	Union Workhouse	?	Infancy	Recovered, June 6, 1904.	A tramp ; was in Liverpool from March 26th to April 2nd.
945	Apr. 18, 1904	M. A. P.	F.	16	3, Turf Street	?	Infancy	Recovered	Had been wearing some old garments bought from a hawker.
958	Apr. 26, 1904	J. H.	M.	42	Union Workhouse	?	Unvaccinated	Recovered, June 27, 1904	Tramp, from Leicester, Nottingham, Mansfield, and Wakefield.
1007	June 13, 1904	S. D.	M.	56	24, Clerke Street (Lodging House)	Manchester ?	Infancy	Recovered, July 11, 1904	A tramp, from Macclesfield, Manchester, and Chorlton-cum-Hardy.
1022	June 27, 1904	A. P.	M.	35	7, Back Moorgate	Case 1007	Infancy and in 1900	Recovered, July 28, 1904	In contact with 1007 on June 11th, 1904.
1023	June 28, 1904	F. S.	M.	27	70, Paradise Street	Case 1007 ?	Infancy	Recovered, July 28, 1904	
1024	June 28, 1904	C. C.	F.	23	7, Garden Street	?	Unvaccinated	Reecoverd, Sep. 1, 1904	Employed at a laundry
1025	June 29, 1904	T. K.	M.	38	29, Back Garden St.	?	Infancy	Recovered, July 28, 1904	
1026	June 29, 1904	J. B.	M.	48	57, Back Georgiana Street	Case 1007	Infancy	Recovered, July 28, 1904	Case 1007 came and dined at this house on June 12th.
1036	July 12, 1904	E. S.	F.	23	161, Bell Lane	Case 1023	Infancy	Recovered, Aug. 4, 1904	Contact with case 1023 on June 27th.
1040	July 11, 1904	E. R.	F.	6	19, George Street	Case 1026	Unvaccinated	Recovered, Sep. 17, 1904	Child usually played in Back Georgiana Street, about 57.
1	2	3	4	5	6	7	8	9	10

1041	July 14, 1904	M. H.	F.	15	20, Union Street	?	Unvaccinated	Recovered, Aug. 25, 1904	A common lodging house in close proximity.
1042	July 14, 1904	W. H.	M.	13	20, Union Street	?	Unvaccinated	Recovered, Aug. 25, 1904	
1043	July 14, 1904	M. A. H.	F.	49	20, Union Street	?	Infancy	Recovered, Aug. 4, 1904	
1045	July 15, 1904	W. H. A.	M.	10	2, Union Square	Cases 1041-2-3	Unvaccinated	Recovered Aug. 18, 1904	Contact with three previous cases, and living close to them.
1051	July 19, 1904	T. F.	M.	46	18, Nuttall Street	?	Unvaccinated	Recovered, Sept. 1, 1904	
1053	July 19, 1904	E. B.	F.	19	55, Back Georgiana Street	Case 1026	Infancy	Recovered, Aug. 11, 1904	Contact with case 1026 on June 29th.
1055	July 21, 1904	J. T.	M.	12	19, Elton Road	Case 1042	Unvaccinated	Recovered, Oct. 5, 1904	Sits near case 1042 in same class at school.
1056	July 21, 1904	E. P.	F.	49	96, Bell Lane		Infancy	Recovered, Aug. 11, 1904	
1075	Aug. 3, 1904	J. A.	M.	35	2, Union Square	Case 1045	Infancy	Recovered, Aug. 18, 1904	Contact with son till July 15th.
1096	Sept. 8, 1904	P. L.	M.	35	42, Brook Street	Oldham	Infancy	Recovered, Oct. 8, 1904	Had been living in Manchester, and Oldham common lodging houses since about August 6th.
1116	Sept. 29, 1904	A. B.	F.	37	37, George Street	Case 1040 ?	Unvaccinated	Died, Oct. 6, 1904	
1119	Oct. 3, 1904	H. H.	M.	28	4, Eldon Street	?	Unvaccinated	Recovered, Nov. 25, 1904	Contact with sister, case 1116, till September 29th.
1133	Oct. 12, 1904	F. W.	F.	38	1, Cooper's Yard	Case 1116	Unvaccinated	Died, Oct. 20, 1904	
1134	Oct 13, 1904	J. C.	M.	48	37, George Street	Cases 1116 and 1133	Infancy	Recovered, Nov. 25, 1904	Lived in same house as 1116 and 1133

SCHOOLS AND INFECTIOUS DISEASES, 1904.

During the year 1,106 notifications were received at the Health Office from the Headmasters and Mistresses of the various Schools within the Borough, of the existence of Infectious or Contagious Diseases amongst scholars attending their Schools. Of this number 931 were certified as suffering from one or other of the under-mentioned ailments :—

Measles... ..	395	Diphtheria	4
Whooping Cough ...	330	Febricula... ..	4
Chicken Pox	75	Sore Head	2
Mumps... ..	39	Sore Throat... ..	2
Influenza	16	Catarrh	2
Ophthalmia	14	Croup... ..	2
Scarlet Fever... ..	13	Tonsillitis	1
Eczema... ..	11	Phthisis	1
Impetigo... ..	11	Quinsy	1
Ringworm... ..	5	Otorrhœa	1

The number of notifications received from the School Authorities during the years 1901, 1902, and 1903 were 776, 1,430, and 1,364 respectively.

The following are the Schools from which notifications were received in the order of number of notification :—

All Saints' School.	Clerke Street School.
Chesham British School.	Wood Street School.
St. Mark's School.	Parish Church School.
Woolfold Wesleyan School.	St. Joseph's School.
Bank Street School.	St. Marie's School.
Brunswick School.	St. John's School.
St. Stephen's School.	Parkhills School.
Christian Church School.	Holy Trinity School.
Pits-o'th'-Moor School.	Guardian Angels' School.
Walmersley School.	Holy Trinity School.
St. Paul's (Bell) School.	St. Thomas' School.
St. Chad's School.	New Connexion School.

Owing to a rather extensive outbreak of Ophthalmia in some portions of the Borough, the following handbill was drawn up and distributed :—

INFLAMMATION OF THE EYES, OR OPHTHALMIA.

This is a very troublesome disease, affecting the eyes of children and others, and is very contagious (or “ catching”).

SIGNS OF THE DISEASE.—The disease first begins with watering of the eyes, often with a feeling of sand or grit in the eye, with hot burning sensations. After sleep the eyelids become glued together with a sticky material. Later the eyelids become swollen, and a discharge of yellowish matter takes place; if one eye is first affected, very soon the other is attacked. The eyes of other children in the same family or in the same class at school may also become affected.

CAUSES. — Among those causes tending to produce Ophthalmia are :—A close and foul atmosphere, draughts of cold air, particles of grit or sand in the eye. It is most often spread, however, from another case of the disease, by means of handkerchiefs, towels, or the fingers. Occasionally the disease occurs as an epidemic; it not unfrequently follows Scarlet Fever and Measles.

PRECAUTIONS.—No child suffering from this affection of the eye should attend school; care should be taken that the patient only uses special towels and handkerchiefs, which should be boiled before they are allowed to be used by anyone else. A shade over the eye may be used if the patient is unable to bear light, but this is usually unnecessary except in severe cases. A doctor should be called in as early as possible, as the disease can often be cut short by following out his directions, and much trouble afterwards saved. In the absence of a doctor, the best remedy is a Lotion of weak Boric Acid applied to the eyes several times a day; a little Boric Acid Ointment or Vaseline should be applied to the eyelids at night to prevent them sticking together after sleeping. The discharges from the eyes are best wiped with bits of clean soft linen, which are then immediately burnt. Parents or Nurses dealing with patients suffering from Ophthalmia, should be very careful to avoid rubbing their own eyes until they have carefully washed their hands, otherwise they may readily contract the disease.

A. E. BRINDLEY, M.D.,

Health Office,
Parsons Lane.

Medical Officer of Health.

SCHOOL CLOSURE.

During the year, with a view to checking the further spread of Infectious Diseases, it was found advisable to close the infant departments of three Schools owing to Measles, and the infant department of two other Schools were closed owing to Whooping Cough. In one of these cases, however, owing to the further spread of the diseases, the whole School was subsequently closed. One School was closed for a week (until the commencement of the summer holidays) owing to one of the scholars developing Smallpox; and one School was also closed owing to prevalence of Scarlet Fever amongst the scholars. In each instance the closing of the Schools proved beneficial in controlling or checking the outbreak. The following is a summary of the Schools closed:—

(1). BANK STREET BRITISH SCHOOL.—The infants' department of this School was closed from January 19th to February 9th, owing to the prevalence of Whooping Cough. On visiting the School I found that out of 80 scholars on the books, with a daily average of attendance of 60, only 25 were present, the majority of the absentees being away suffering from Whooping Cough.

(2). CHESHAM BRITISH SCHOOL.—The infants' department of this School was closed from January 19th until February 1st, on account of the existence of Measles and Whooping Cough amongst the scholars. Out of 148 scholars on the books, with a daily average of 110, only 66 were present when I visited the School, the rest being away either through Measles or Whooping Cough.

(3). WALMERSLEY NATIONAL SCHOOL.—Owing to the prevalence of Measles and Whooping Cough amongst the children attending the infants' department of this School it was found advisable to close this portion of the School from February 3rd until February 22nd, as out of 80 scholars on the books, with a daily average of 52, only 19 were present on February 2nd, the rest being away suffering from either Measles or Whooping Cough or suspected cases.

The whole of the School was subsequently closed on March 22nd until April 7th on account of Measles and Whooping Cough having spread amongst the scholars attending the mixed department.

(4). HOLY TRINITY SCHOOL.—The infants' department of this School was closed from February 15th until March 7th owing to the prevalence of Measles amongst the scholars. On enquiry at the School on February 15th I found only 75 children present out of a total of 149 on the books, with a daily average attendance of 105. The absentees were chiefly suffering from Measles, and also a few from Whooping Cough.

(5). ST. PAUL'S (BELL) SCHOOL.—The infants' department of this School was closed from March 3rd until March 21st owing to the prevalence of Measles amongst the scholars. On enquiry I found that out of a total of 112 on the books, with a daily average of 89, only 55 scholars were present. The majority of the absentees were away suffering from Measles.

(6). ALL SAINTS' SCHOOL.—Closure was applied to the infants' department of this School on March 8th until March 28th, owing to the prevalence of Measles amongst the scholars. On enquiry at the School on March 8th I found 82 scholars present out of a total of 175, with a daily average attendance of 130.

(7). BIRCLE NATIONAL SCHOOL.—The whole of this School was closed from March 24th until April 1st owing to the prevalence of Scarlet Fever amongst the scholars. On enquiry it was found that in the mixed department out of a total of 175 scholars on the books, with an average daily attendance of 135, only 96 were present, whilst in the infants' department only 25 were present out of a total of 60 on the books, the majority of the absentees being away through or suffering from Scarlet Fever.

(8). BANK STREET BRITISH SCHOOL.—The whole of this School was closed from July 22nd to July 29th (the commencement of the summer holidays) owing to the outbreak of Smallpox. On July 21st a case of Smallpox occurred in a scholar attending this School, and on enquiry it was found that other members of the family were also attending the School.

DISINFECTION.

In each instance after the closure of a School the walls and floors have been sprayed with a solution of either formalin or "chloros," and the rooms afterwards fumigated with sulphur. Special attention has been paid to the disinfection of the books, slates, &c., used by the scholars.

MEASLES.

RATE OF MORTALITY FROM MEASLES FOR THE LAST TWELVE YEARS.

Year.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904.				
												England & Wales	76 Great Towns	142 Smaller Towns	London	Bury
Death rate per 1000.	1.44	0.05	0.52	0.55	0.53	0.29	0.08	0.42	0.13	0.29	0.43	0.36	0.47	0.36	0.49	0.46
Total Deaths	84	3	31	33	32	18	5	26	8	17	25					27

Twenty-seven deaths were recorded from Measles during the year, as compared with 25 deaths during the previous year, the rate of mortality, 0.46 per 1,000, being higher than the average (0.37) for the past ten years.

WARD DISTRIBUTION.

Moorside...	5
East ...	6
Church...	6
Redvales...	3
Elton ...	7
	27

AGE AND SEX.

	Under 1 year.	1 to 2.	2 to 5.	Over 5 years.	Totals.
Males...	2	9	0	0	11
Females...	6	8	2	0	16
Totals ...	8	17	2	0	27

MONTHLY INCIDENCE.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
6	6	9	0	1	0	0	0	0	0	3	2

CLOSURE OF SCHOOLS.—Owing to the prevalence of Measles among the scholars, the following schools have been closed :—

- (1.) Chesham British School (Measles and Whooping Cough), January 19th to February 1st.
- (2.) Walmersley National School (Measles and Whooping Cough), February 3rd to 22nd.

(3.) Holy Trinity Schools (Measles and Whooping Cough), February 15th to March 7th.

(4.) St. Paul's (Bell) School (Measles), March 3rd to 21st.

(5.) All Saints' School (Measles), March 8th to 28th.

Only the infants' department in each case was closed; but in the case of No. 2, subsequent closure of the whole school had to be carried out from March 22nd till April 7th.

PRECAUTIONARY MEASURES. — The following steps were adopted in connection with the outbreaks of Measles:—

(i.) Notification of the disease by School Teachers on printed forms supplied by the Health Department. 395 cases of Measles were thus notified.

(ii.) Each case was visited, where possible, by the Female Sanitary Inspector, who left handbills, and gave advice as to the precautions to be used.

(iii.) Closure of Schools, chiefly the Infants' Departments, affected by the disease. A request was always made to the Sunday School Authorities to have this portion of the School closed during the period of closure of the Day School.

(iv.) Disinfection of houses affected, by means of formalin spray, &c., where consent could be obtained.

(v.) Thorough disinfection of affected Schools, with special attention to books, slates, &c.

The comparatively large number of deaths from Measles which annually occur is to be regretted, for doubtless many of these could be and would be prevented if it were remembered that Measles is a serious disease, especially in children under the age of five years. It will be noticed from the above table of monthly incidence of deaths from Measles that these mainly occur during the colder months of the year.

As compared with Scarlet Fever, the past ten years show that the death rate from Measles has always exceeded that from Scarlet Fever, except in one year (1899), when the death rates from the two diseases were identical.

WHOOPIING COUGH.

During the year 42 deaths have been recorded from Whooping Cough, which is equal to a death rate of 0.72 per 1,000, as compared with a rate of 0.34 per 1,000 for England and Wales, 0.40 per 1,000 for the 76 great towns, 0.35 per 1,000 for the 142 smaller towns, and 0.32 per 1,000 for London. In 1903 in Bury there was a death rate of only 0.12 per 1,000.

DEATHS FROM WHOOPING COUGH DURING THE LAST TEN YEARS.

1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
19	32	7	25	2	34	0	10	7	42

Of the fatal cases this year 18 were under one year old, the remaining 25 being under five years.

AGE AND SEX DISTRIBUTION.

	AGE.—	Under 1 year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	Total
Male	12	...	7	...	2	...	21
Female... ..	6	...	9	...	6	...	21
Both sexes... ..	18	...	16	...	8	...	42

WARD DISTRIBUTION.

Moorside... ..	8
East... ..	13
Church... ..	5
Redvales	6
Elton... ..	10
	—
	42
	—

SCHOOL CLOSURE.—During the past year only one School (Infants' Department) has had to be closed on account of the prevalence of Whooping Cough amongst the scholars, viz., Bank Street British School, from January 19th to February 9th. But three others had to be closed on account of the large combined number of cases of Measles or Whooping Cough among the scholars, viz. :—

- (1) Chesham British School—January 19th to February 1st.
- (2) Walmersley National School—February 3rd to 22nd.
- (3) Holy Trinity School—February 15th to March 7th.

In each case only the Infants' Department was closed, but subsequent closure of all the departments of Walmersley National School was resorted to, from March 22nd to April 7th, owing to the same causes.

It will be observed that all the deaths occurred in children under the age of three years. The comparatively large number of deaths from Whooping Cough and Measles is a matter for very grave consideration, these two diseases causing 69 deaths in 1904, all in children under the age of five years. Scarlet Fever, Diphtheria, Enteric and Continued Fever, Smallpox, and Puerperal Fever combined, accounted for only 29 deaths in the year; that is, less than one-half of the deaths from Whooping Cough and Measles.

INFLUENZA.

During the year 11 deaths have resulted from Influenza, representing a death rate of 0.19 per 1,000.

DEATHS DURING THE LAST EIGHT YEARS FROM INFLUENZA.

1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
10	17	24	34	12	6	5	11

WARD DISTRIBUTION.

Moorside	0
East...	3
Church	6
Redvales	2
Elton...	0
	11

MONTHLY INCIDENCE.

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	1	0	0	1	0	2	0	2	1	3

AGE DISTRIBUTION.

AGES.—15 to 25 years.	25 to 65 years.	65 and over	Totals.
1	7	3	11

Sixteen cases of Influenza were notified by the Teachers in the various Schools in the district

DIARRHŒA.

RATE OF MORTALITY FOR THE PAST TEN YEARS.

Year.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904.				
										England & Wales.	London	76 Great Towns	103 Smaller Towns.	Bury.
Death rate per 1000	1·37	0·85	1·56	1·46	1·20	0·85	1·06	0·24	0·84	0·86	1·03	1·20	0·89	0·77

Forty-five deaths have been recorded from Diarrhœa during 1904, as compared with 49 in the previous year. The rate of mortality is equivalent to 0.77 per 1,000, as compared with 0.84 per 1,000 in the previous year, and with 0.97 per 1,000, the average for the last ten years. This rate is a slight improvement on last year's, and compares favourably with the rates in other towns, yet it is hardly satisfactory. As usual, the heaviest incidence is on infants under one year of age, who represent 36, or 80 per cent. of the total deaths.

MONTHLY INCIDENCE.

January	1	July	2
February	0	August	26
March	1	September	10
April... ..	0	October... ..	4
May	0	November	1
June... ..	0	December	0

WARD DISTRIBUTION.

Ward.	No. of Deaths.
Moorside	12
East... ..	11
Church	6
Redvales	4
Elton..	12

AGE PERIODS.

Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 upwards.
36	6	0	0	2	1

On enquiry as to the feeding of the 36 children under one year of age, it was ascertained that only one of the whole number was breast-fed, the rest all having been bottle-fed entirely.

The year 1904 was a specially dry year, and so favoured the occurrence of Summer Diarrhœa. This disease has an intimate relation with a high earth temperature with the presence of dust (especially containing particles of animals' excreta) in the atmosphere, and also with increase in number of house flies and other allied insects. The two latter agencies, namely, fæcal dust and flies, act by infecting food, especially milk, which is an admirable food for many germs of disease, and readily absorbs effluvia.

In the Scavenging Department of the town, special attention is given to street cleansing during the late summer and early autumn months, that is the so-called Diarrhœa seasons. All raising of dust by sweeping machines or by hand is, as far as possible, obviated by the use of water. For some time the water cart preceded the machine brushes in the sweeping of the streets, but recently a machine has been acquired which combines sprinkling of water with the sweeping, thus lessening the amount of water used, and saving the cost of an extra horse with the water barrel. Unfortunately, owing to the scarcity of water, street watering had to be stopped just at a time when it was most needed, but fortunately a limited supply was available near the centre of the town from a private source.

TUBERCULOUS DISEASES.

PHTHISIS.

Phthisis caused 97 deaths during the year, of which 69, or 71.14 per cent., were males, and 28, or 28.86 per cent., were females, the rate of mortality being equal to 1.66 per 1,000, as compared with a rate of 1.18 per 1,000 in 1903. Fifteen of the deaths occurred in the Union Workhouse, and one in the Prestwich Asylum.

Of the deaths from Phthisis, the following table shows the age and sex distribution :—

	Under								Over	All
	1.	1 to 5.	5 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 60.	60.	Ages	
Male	0	1	2	7	15	20	19	5		69
Female	1	1	4	7	8	3	2	2		28

MEAN AGE AT DEATH FROM PHTHISIS.

Males	24 years.
Females	27½ years.

WARD DISTRIBUTION OF DEATHS FROM PHTHISIS.

	Moorside.	East.	Church.	Redvales.	Elton.	Total.
Males... ..	10	19	19	8	13	69
Females	9	4	5	2	8	28

DEATH RATES FOR PHTHISIS IN THE SEVERAL WARDS.

Moorside.	East.	Church.	Redvales.	Elton.	Entire Borough.
1.31	1.95	3.3	0.94	1.49	1.66

DISINFECTION.—A summary of the disinfection which has been carried out will be found on reference to page 58.

OCCUPATIONS OF PERSONS DYING FROM PHTHISIS DURING THE
YEARS 1899-1904.

	1899.	1900.	1901.	1902.	1903.	Average of 5 Years 1899-1903.	1904
Cotton Operatives	20	18	24	13	16	18	11
Woollen Operatives	2	1	3	—	2	1.6	—
Felt Hat Workers	2	4	2	3	2	2.6	2
Paper Mill Workers	2	2	3	2	2	2.2	—
Iron Operatives... ..	4	7	0	11	8	6.4	6
Stone Masons	3	4	2	2	—	2.2	5
Dressmakers and Tailors... ..	4	3	—	3	—	2	2
Joiners and Cabinetmakers	4	0	2	2	2	2	3
Shoemakers and Cloggers... ..	1	2	—	2	—	1	2
Clerks	3	—	—	—	2	1	1
Outdoor Labourers & Carters ...	14	6	8	10	6	9	25
Other or no employment... ..	31	51	49	27	29	37.4	40
Totals	92	98	93	75	69	85.4	97

The following table shows approximately the *sex death rate from Phthisis* per 1,000 during the same period among those engaged in the cotton industry.

	1899.	1900.	1901.	1902.	1903.	1904.
Males	3.17	2.85	5.07	2.53	2.53	1.27
Females... ..	1.27	1.14	1.02	0.64	1.02	0.89

VOLUNTARY NOTIFICATION OF PHTHISIS.—This system of notification has resulted in 44 fresh cases being notified during the year, making a total of 186 notifications since the adoption of voluntary notification by the Council on September 5th, 1901.

34 of the notified cases were visited by the Female Sanitary Inspector, the remainder (ten in number) either dying immediately after the notification, or having been previously notified.

SEX.—Of the 44 cases, 24 were males and 20 females.

AGES.—The ages were :—

Under one year... ..	2
1 to 20	16
20 to 40... ..	18
40 to 50... ..	5
50 to 60... ..	3
	—
	44
	—

The following are the occupations of the 34 investigated cases :—

School Children...	5
Cabman ...	1
Sugar Boiler...	1
Outdoor Labourers ...	3
Cotton Worker ...	1
Mill Hands ...	9
Clerk ...	1
Stone Mason...	1
Printer ...	1
Painter ...	1
Tailor...	1
Costumier ...	1
Engine Cleaner...	1
Housewife ...	1
No Occupations ...	6
	34

Spittoons were loaned, and antiseptic handkerchiefs were gratuitously supplied, to the patients.

Handbills on “How to prevent Consumption” and on “Fresh Air and Ventilation” were left at the houses of the notified cases.

OTHER TUBERCULOUS DISEASES.—Forty-four deaths were recorded from tubercular diseases other than Phthisis, as compared with 34 deaths in the preceding year. Of these, 14 deaths were due to Tuberculosis of Brain, 17 to Abdominal Tuberculosis, seven to General Tuberculosis, and six to other forms of Tuberculosis. The following are the age periods of these deaths :—

Under 1	1 and under 5.	5 and under 10.	10 and under 15.	15 and under 25.	20 and under 35.	35 and under 45.	45 upwards.	Total.
16	12	3	3	2	5	2	1	44

Tuberculosis, therefore, was responsible for 141 deaths in 1904, a rate of mortality of 2.4 per 1,000.

BACTERIOLOGICAL EXAMINATION OF SPUTUM.—The sputa of 30 suspected cases of Phthisis were sent in special tins to the Public Health Laboratory, Manchester.

In five cases the presence of tubercle bacilli was revealed. In the remaining 25 cases the examination was negative.

C A N C E R.

During the year 41 deaths have been certified as due to various forms of Malignant Disease, as compared with 53 deaths in the preceding year. Of these deaths 14 were males and 27 females.

The following table gives the ward distribution of these deaths and the rate of mortality in each ward:—

Ward.	Number of Deaths.	Rate per 1000.
Moorside... ..	15	1.03
East	6	0.51
Church	6	0.82
Redvales... ..	10	0.93
Elton	4	0.28
Total... ..	41	0.70

CHARACTER OF DISEASE :

“ Cancer ”	18
Carcinoma	16
Epithelioma... ..	4
Scirrhus... ..	1
Sarcoma	1
Malignant Disease	1
	41

ORGANS AFFECTED.

Males.	Females.
Tongue 2	Uterus 7
Stomach... .. 2	Breast 4
Intestine... .. 2	Stomach... .. 3
Face 1	Intestine... .. 3
Jaw 1	Liver 3
Larynx 1	Œsophagus... .. 1
Groin... .. 1	Rectum 1
Neck 1	Cervix 1
Anus 1	Spleen 1
Omentum 1	Not stated 3
Not stated 1	
14	27

DISINFECTION.

The following is a summary of the disinfection carried out during the year in the reported cases of Infectious Diseases :—

372 rooms in 311 houses were disinfected with the fumes of either sulphur or formaldehyde, and the walls of 768 rooms in 349 houses sprayed with a solution of either formalin or carbolic acid.

47 rooms in 23 houses have been fumigated with sulphur, and the walls of 204 rooms in 55 houses syringed with a solution of formalin or “ chloros ” after the occurrence of Smallpox.

122 rooms in 31 houses have been fumigated at the request of either the tenant or owner.

Eight public schools have been fumigated with sulphur, and the desks, books, walls, &c., sprayed with a solution of formalin or “ chloros ” after the occurrence of Infectious Diseases.

22 rooms in 14 houses have been stoved with sulphur, and the walls of 110 rooms in 56 houses syringed with a solution of formalin, after the occurrence of deaths from Phthisis.

149 parcels of clothing and 336 sets of bedding have been disinfected by steam for infectious diseases, and 22 parcels of clothing and 39 sets of bedding after the occurrence of Smallpox.

MEAT INSPECTION. THE PUBLIC ABATTOIRS.

During the year 3,904 beasts, 998 calves, 16,608 sheep, 4,465 large pigs, 123 small pigs, were slaughtered in the Public Abattoirs. Of the 3,904 beasts (cows, heifers, bulls, and bullocks), 32, or 0.8 per cent., were found to be affected with tuberculosis, but in no single instance was this either so great in extent or of such a nature as to necessitate condemnation of the whole carcase; in each instance the affected organs or parts affected were destroyed. Of the 4,588 pigs killed, only eight, or 0.17 per cent., were affected with tuberculosis; six carcasses were destroyed during the year.

In all cases the carcasses or organs (as the case might be) were voluntarily surrendered by their respective owners, and in no case was it necessary to formally condemn and destroy the diseased parts.

The quality of meat killed has well maintained its standard of excellence.



DAIRIES, COWSHEDS, AND MILKSHOPS.

These premises have been kept under constant supervision by Inspector Openshaw during the year. A reference to his Report on page 92 will illustrate the steps which have been taken during the year with the view of improving drainage and other sanitary defects in some of them. As regards the quality of the milk retailed in the town, the Report of the Borough Analyst will show that the standard has been well maintained, although proceedings have been instituted during the year for adulteration of milk in two instances, but in each instance the case was dismissed.

The milk supply of the Borough is perhaps second in importance only to that of the water supply, and much remains to be done before milk attains a satisfactory standard of bacterial purity. Milk, as is well known, is not only a perfect food for young children, for invalids and others, but it is at the same time

a perfect food for many germs of disease. As yet no standard of bacterial purity has been raised, and this is from a point of view of the public health, of far more importance than the relative amount of cream, although one would not desire to belittle the need of a standard of nutritive quality.

In America, however, in some of the States, a definite standard of bacterial purity is insisted upon. Recently the question of municipalising the milk supply has been seriously raised; I think, however, this should be our last resort, and one which should not be attempted until the impossibility of securing a wholesome supply of milk from private sources has been proved. I believe that in Rochester, U.S.A., milk is supplied from private farms by contract under the following conditions:—(1) That the buildings and premises generally shall be constructed and kept to the satisfaction of the Authority obtaining milk from them; (2) that the milk supplied shall not fall below a stated standard of bacterial purity, and (3) that the officers of the Authority should have free access at all times to the premises.

At present the milk contract of the Bury and District Infectious Diseases Hospital is obtained on the following conditions:—(1) That the farm premises shall be kept in a satisfactory sanitary condition, (2) that no milk shall be supplied to the Hospital from any animal which reacts to the tuberculin test.

One would like to go a little further than this and make bacterial purity a condition of the contract.

One or two farms in the Borough possess suitable apparatus for cooling milk, and in some instances the milk is cooled by placing the milk cans in troughs containing running water, but many farms possess no means of cooling the milk.

WATER SUPPLY.

PUBLIC SUPPLY.—The public service of the Borough is derived from three of the Reservoirs belonging to the Bury and District Joint Water Board. The Board includes the following Authorities :—Bury, Radcliffe, Ramsbottom, Tottington, Haslingden, Rawtenstall, Whitefield, Little Lever, and Bury Rural. The area supplied is 80 square miles.

The three Reservoirs supplying Bury are :—

Gin Hall (situated in Bury) supplying 10,174 houses.

Calf Hey (situated in Haslingden Borough) supplying 1,673 houses, chiefly in the districts of Limefield, Bell Lane, Blackford Bridge, Woolfold, and Walshaw.

Hapton (situated partly in Rawtenstall Borough, partly in the Burnley district) supplying 1,392 houses, chiefly in the Chesham district.

The total number of houses supplied at March 31st, 1905, was 13,239.

RAINFALL, 1904.

Gin Hall	38.01 inches,	compared with	53.06 in 1903.
Calf Hey... ..	43.66	„ „ „	61.53 „
Hapton	37.63	„ „ „	54.88 „

An average of 39.76 inches, compared with 56.49 inches in 1903, and 37.91 in 1902.

DISTRIBUTION.—572 yards of 12-inch, 297 yards of 6-inch, and 467 yards of 4-inch mains have been laid during year; 394 yards of 12-inch, 146 yards of 6-inch, and 73 yards of 4-inch mains have been renewed.

The mains are flushed when required; several “dead ends” have been removed.

From April 1st, 1904, to March 31st, 1905, there were 94 new houses connected to the public service, and 49 houses were disconnected.

WATER CLOSETS.—During the year (April 1st, 1904, to March 31st, 1905) water supply was connected to 176 water closets and 54 baths, in accordance with the regulations of the Water Works Department.

PRIVATE WATER SUPPLY.—At the end of the year 1904 there were eight houses, 98 cottages, and two schools supplied with water from private sources. The following list shows the situation and number of houses so supplied :—

2 houses, Springs.	1 house, Chesham Green.
4 cottages, Springs.	1 house, South View.
2 cottages, Well Brow.	1 house, Birchen Bower.
1 cottage, Bury Ground.	1 house, Broom House.
2 cottages, Holebottom.	44 cottages, Woodhill.
2 cottages, The Hagg.	School, Woodhill.
2 cottages, Spring Cottages.	9 cottages, School Street.
School, Woodgate Hill.	12 cottages, Yates Terrace.
1 cottage, Cinder Hill.	4 cottages, Duckworth Fold
3 cottages, near Bury	1 cottage, Chesham.
Reservoir.	1 cottage, Gipsy Brook.
3 cottages, Woodhill Road.	2 cottages, Chesham Green.
1 house, Green Bank.	3 cottages, Cinder Hill.
1 house, Chesham.	2 cottages, Lowes.

WATER SUPPLY DURING THE YEAR.—The average rainfall during the year was considerably less than that of 1903, the scarcity continuing up to the end of the year.

Appended is a table showing the number of days' available supply in the Reservoirs each month of the year, as compared with the previous two years.

1904.	Days' Supply.	1903.	Days' Supply.	1902.	Days' Supply
Jan.	7..... 133	Jan.	1..... 97	Jan.	2..... 101
Feb.	4..... 139	Feb.	5..... 120	Feb.	6..... 124
Mar.	3..... 138	Mar.	5..... 134	Mar.	6..... 123
April	7..... 132	April	2..... 139	April	3..... 121
May	5..... 129	May	7..... 130	May	1..... 120
June	2..... 116	June	3..... 129	May	30..... 114
July	7..... 93	July	1..... 103	July	3..... 90
Aug.	4..... 61	Aug.	6..... 87	Aug.	7..... 75
Sep.	1..... 63	Sep.	1..... 104	Sep.	4..... 72
Oct.	6..... 40	Oct.	1..... 124	Oct.	2..... 54
Nov.	3..... 34	Nov.	5..... 140	Nov.	4..... 72
Dec.	1..... 52	Dec.	3..... 140	Dec.	3..... 74

The supply is calculated on a basis of 20 gallons per head per diem, after deducting the necessary quantity of compensation water.

FACTORIES AND WORKSHOPS.

The Workshops have during the year been kept under constant supervision.

General Sanitation.—As regards cleanliness, air space, and ventilation, the workshops within the Borough have generally been found to comply with all requirements. The occupiers of workshops have also shown a willingness to carry out any suggestion that would tend to the increased efficiency of the workroom. In one or two instances, however—say where one male and one female only were employed, and there has not been separate sanitary conveniences provided—the occupier has dispensed with the service of one of them before he would go to the expense of providing separate sanitary conveniences.

Bakehouses.—The bakehouses, of which there are 87, being an increase of three over the previous year, have also been kept under supervision during the year, and have been conducted in a very satisfactory manner.

In four instances drain openings were discovered inside bakehouses. On the attention of the occupier being drawn to this breach of the Bye-laws, steps have been immediately taken, by the placing of the gulley outside the bakehouse, to comply with the requirements.

During the year a licence was granted for the use of a cellar as a bakehouse, this making the second licence granted for this class of bakehouse.

The whole of the bakehouses within the Borough have been limewashed during the year in accordance with requirements.

Shop Hours Acts.—The duty of carrying out the provisions of these Acts have been entrusted to Inspector Haworth and Nurse Walton, as have also the provisions under the Seats for Shop Assistants Act, the Inspectors paying 146 visits to the various shops within the Borough in the performance of these duties.

Homework.—Lists containing the names and addresses of home workers have been received from several firms and entered in the Register.

A notice was also received in respect of an outworker residing in Bury who was employed by a firm in another district.

Notices from Factory Inspector.—During the year, H.M. Inspector has reported on the existence of the undermentioned sanitary defects in the Factories and Workshops within the Borough :—

NATURE OF COMPLAINT.	REMEDIES ADOPTED.
(1) Limewashing required.	Complied with.
(2) Limewashing required.	Complied with.
(3) Insufficient sanitary accommodation with offensive midden.	Four water closets (latrines) provided.
(4) Insufficient closet accommodation on privy system.	Five water closets fixed and an additional water closet provided.
(5) Insufficient closet accommodation on privy system.	Two sets of fresh water closets (latrines) for four and two seats respectively, provided.
(6) Closets insanitary—urinal in one of the rooms.	Matter in abeyance, there being no suitable sewer.
(7) No closet.	Closet provided.
(8) No closet.	Closet provided.
(9) Closets insufficient and insanitary.	Three blocks of new closets built and fitted with three sets of latrines, for six, six, and four seats respectively.
(10) Workroom not in cleanly condition.	Workroom cleansed and lime-washed.
(11) Air of workroom much vitiated by fumes from gas irons.	Skylight ventilators will be kept open in future so that those employed cannot shut them.
(12) Sanitary accommodation for women unsuitable owing to publicity of approach to it.	Publicity arises owing to men's workroom being all glass. Owner has consented to have the lower panes painted, which will remove cause of complaint.
(13) Workroom not in a cleanly state. No separate sanitary accommodation for women employed.	Workroom cleansed. Only one woman employed, and will be discharged if necessary.
(14) Workroom not in cleanly state.	Workroom cleansed.
(15) No separate sanitary accommodation for women employed.	Negotiations pending.

NATURE OF COMPLAINT.	REMEDIES ADOPTED.
(16) Sanitary accommodation for women employed is without light or ventilation.	Lighting and ventilation are quite sufficient.
(17) Sanitary accommodation insufficient for workers in dress and mantle departments.	41 women employed in these departments, and two sanitary conveniences are provided, which are quite sufficient.
(18) Closet without pail and seat.	Present closets demolished. New wooden structure erected and sufficient number of pails provided.
(19) No pail to closet.	New pail provided.
(20) Closet in dilapidated wooden structure, and not emptied sufficiently often.	Closet put in satisfactory state of repair, and arrangements made for more satisfactory emptying.
(21) Insanitary midden privies.	New closets built and fitted with two sets of latrines, for five and three seats respectively.
(22) Insanitary privy closets.	Water closet provided.
(23) Closet very unsatisfactory.	Owner giving workshop up.
(24) Closet is a dilapidated wooden structure—not weather proof.	Closet made proof against weather.
(25) Closet open to public.	Lock and key provided for closet door.
(26) Closet is a dilapidated structure, and so filthy as to be unusable.	Closet repaired and lime-washed
(27) No closet.	Matter receiving attention.
(28) No closet.	Matter receiving attention.
(29) Closet accommodation for women in shed insufficient.	Matter receiving attention.
(30) Insufficient closet accommodation.	No sewer available for the conversion of these closets to the water carriage system at present.
(31) No pail to closet.	Closet provided.
(32) Closets insufficient in number, dirty, and not emptied sufficiently often.	Four water closets (latrines) provided.

NATURE OF COMPLAINT.	REMEDIES ADOPTED.
(33) Unscreened males and females' closets.	Closets screened.
(34) Closet accommodation very unsatisfactory.	One water closet provided.
(35) Unscreened females' closets.	Closets satisfactorily screened.
(36) Insanitary tower and midden system of closets. Midden closets for males and females in basement. Insanitary tower and midden system of closets for spinning room.	No sewer available for the conversion of these closets to the water carriage system.
(37) Insufficient closet accommodation.	Two water closets provided.
(38) Insanitary closets in yard for males and females.	Negotiations pending.
(39) Insanitary midden closets off shed. Two pail closets in yard side by side used by males and females, without separate entrances or approaches.	Work of reconstruction in progress.
(40) Midden closets. Insufficient accommodation for females.	Closets demolished, and a sufficient number of fresh water closets substituted.
(41) Insufficient closet accommodation.	35 males have four closets. Two of these have been connected for females.
(42) Insanitary midden closets.	In abeyance.
(43) Insufficient closet accommodation for females.	Accommodation found quite sufficient.
(44) Unscreened males and females' closets.	Closets satisfactorily screened.
(45) Insufficient closet accommodation for males.	Two water closets provided.
(46) Insanitary midden closets.	In abeyance.
(47) Insufficient closet accommodation for females. No doors or intervening ventilated space for females' closets off weaving shed.	In abeyance.

NATURE OF COMPLAINT.	REMEDIES ADOPTED.
(48) Insanitary and insufficient closet accommodation.	In abeyance.
(49) Insanitary tower and midden system of closets.	Scheme for reconstruction in hand.
(50) Unequally distributed closets on midden system.	Sufficient number of water closets substituted.
(51) No doors to two female closets.	New doors provided.
(52) No doors or fastenings to females' closets.	Sufficient number of doors and fastenings provided.
(53) Insufficient closet accommodation.	Additional water closet provided.
(54) Unscreened males' closets.	Closets screened.
(55) Insufficient closet accommodation for males and females. Insanitary tower and midden system of closets.	Two additional pails provided. No sewer available for the conversion of these closets to the water carriage system.
(56) Insufficient and insanitary closet accommodation for males and females.	Negotiations pending.
(57) Insufficient closet accommodation for males.	Additional water closet provided.
(58) Insufficient closet accommodation for females. Unscreened males' urinals, and closets without doors.	Sixteen water closets (latrines) provided (six being additional).
(59) Unscreened male closets.	Suitable screen provided.
(60) Unventilated urinals. Insanitary tank closets.	Matter receiving attention.
(61) Closets unequally distributed between sexes, with insufficient closet accommodation for females.	Scheme for reconstruction in hand.
(62) Closet at great distance from mill, and separate provision for sexes not provided.	Matter receiving attention.

Copy of Table sent to the Home Office at the request of the Secretary of State.

**Annual Report of Medical Officer of Health for 1904, for the County
Borough of Bury.**

**FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND
HOMEWORK.**

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	68	3	..
Workshops (Including Workshop Laundries.)	146	..	..
Workplaces	..	..	..
Homeworkers' Premises	16	..	..
Total	230	3	..

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts:—</i>				
Want of cleanliness	3	3	..	..
Want of ventilation	3	3	..	..
Overcrowding	..	..	..	..
Want of drainage of floors	..	..	..	..
Other nuisances	10	10	..	..
†Sanitary accomodations	27	21	..	..
	22	15	..	..
	9	8	..	..
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bakehouse (S. 101)	1	1	..	..
Breach of special sanitary requirements for bakehouses (SS. 97 to 100.) ...	4	4	..	..
Failure as regard lists of outworkers (S. 107)	..	..	..	..
Giving out work to } unwholesome be done in } (S. 108)	..	..	..	..
premises which are } infected (S. 110)	..	..	..	..
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109)	..	..	..	..
Other offences... ..	1	1	..	..
Total	81	67	..	..

OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspectors of Factories :—		
Failure to affix Abstract of the Factory & Workshop Act (S. 133)		1
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)	Notified by H.M. Inspector	62
	Reports (of action taken) sent to H.M. Inspectors.	62
Other		
Underground Bakehouses (S. 101) :—		
In use during 1903		4
Certificates granted	in 1903	1
	in 1904	1
In use at the end of 1904		2
Homework :—		Number of
<i>List of Outworkers</i> (S. 107) :—		Lists. Outworkers.
Lists received		6 16
Addresses of outworkers	forwarded to other Authorities .	— —
	received from other Authorities	1 1
<i>Homework in unwholesome or infected premises</i> :—		Wearing Apparel; Other.
Notices prohibiting homework in unwholesome premises (S. 108)		— —
Cases of infectious disease notified in homeworkers' premises		— —
Orders prohibiting homework in infected premises (S. 110)		— —
Workshops on the Register (S. 131) at the end of 1904.		
Important classes of work-shops, such as workshop bakehouses, may be enumerated here.	Bakehouses	87
	Dress and Mantle Makers	48
	Cloggers	32
	Tailors	40
	Boot and Shoe Makers ...	42
	Millinery	28
	Tinplate Workers... ..	14
	Other trades... ..	139
Total number of workshops on register		430

SMOKE NUISANCE.

During the year ten observations, of one hour each, have been taken of mill chimneys within the Borough, with the result that four firms exceeded the time limit, of ten minutes "black smoke" per hour, allowed by the Health Committee. In each case the offending firms were served with a notice requiring the abatement of the nuisance.

The number of smoke observations taken in Bury shows a marked diminution since the year 1901, with a corresponding increase in the atmospheric pollution from smoke. As will be seen from the appended list, Bury compares very unfavourably with the neighbouring towns of Rochdale, Heywood, and Radcliffe in the number of observations taken :—

NUMBER OF SMOKE OBSERVATIONS.

Name of Town.	1901.	1902.	1903.	1904.
Rochdale... ..	149	145	126	105
Heywood	30	37	28	34
Radcliffe	76	48	41	30
Bury	37	7	10	10

At the Glasgow Conference held in July, 1904, the smoke problem came in for serious consideration. The Lord Provost of Glasgow, Sir Ure Primrose, made some admirable observations on the subject. He expressed his belief that the bulk of smoke pollution was preventable, easily preventable, and (what was more) economically preventable.

He stated that we had so long been accustomed to expect the smoke-laden atmosphere, as one of the evils of city existence, that we had settled down into a dull state of resignation and partially forgot all about it. He believed that once the mass of city dwellers realised the disease-bearing properties that lurk in the smoke pall which enshrouded them day by day, they might expect the inertia which at present retarded progress to disappear.

CLEANSING DEPARTMENT.

CLEANSING COMMITTEE, 1904-5.

CHAIRMAN—COUNCILLOR JOHN TAYLOR.

DEPUTY CHAIRMAN - COUNCILLOR T. B. SMITH.

THE MAYOR.

ALDERMAN COLLINGE.

COUNCILLOR ROTHWELL.

„ HOLT.

„ SHARP.

COUNCILLOR AINSWORTH.

„ P. SMITH.

„ GREENHALGH.

„ JOSEPH TAYLOR.

Chief Officials :

MEDICAL OFFICER OF HEALTH.

BOROUGH ENGINEER.

DUTIES.—To have the control and management of the Stable Yard at Fernhill.

To have charge of all the horses, carts, and carriages of the Corporation, with powers to buy, sell, and exchange horses, carts, and carriages, corn, hay, and other provender, and all other articles and things necessary for the working thereof, and keeping the same in proper repair.

To have control and management of the scavenging and watering of roads, streets, highways, and places of public resort, and the collection, reception, storing, dealing with, sale, and disposal of excreta, ashes, noxious matter, manure, garbage, offal and refuse, made, produced, found, accumulated, or being within the Borough, such last mentioned works to be under the supervision of the Medical Officer of Health; also to have control and management of the smith and wheelwright's department, salting and sanding of streets, snow removal, and the Fernhill Destructor, such last-mentioned works to be under the supervision of the Borough Engineer.

The Medical Officer of Health and the Borough Engineer to be the responsible officers of the Committee, each to have control of the horses and carts in his department, with power to engage and dismiss carters.

MEETINGS.—The Committee meet on the Monday in each month immediately preceding the 16th day before the Council Meeting, at 4-15 o'clock in the afternoon.

NIGHTSOIL DEPARTMENT.

From a reference to Appendix E, it will be seen that the number of loads removed from ashpits shows a slight diminution as compared with the previous year. This is accounted for by (1) the adoption of larger carts for the conveyance of refuse from ashpits in connection with water closets and pail closets, and (2) the weighing of all refuse taken to the Fernhill Destructor.

During the year the total number of loads of refuse removed from ashpits was 15,546, which have been disposed of as follows :

To Destructor at Fernhill	12138
To the various tips	3408

One unsatisfactory feature of the nightsoil department is the large number of applications received (1,122) for the emptying of ashpits.

With a view of ensuring more uniformity with regard to the receptacles provided for household refuse in new houses, the Sewering and Paving Committee adopted the following resolution in the early part of the year :—“ That all persons submitting plans for the erection of new property or alteration to existing premises be recommended to adopt a uniform size of ashpit or ashbin.”

CONVERSIONS TO THE WATER CARRIAGE SYSTEM.—It is satisfactory to record that a considerable number of conversions of insanitary conveniences to the water carriage system took place during the year, no fewer than 361 of the latter being so altered. Of this number, 306 were in connection with private houses, 45 with factories and workshops, and ten in connection with public elementary schools.

In addition, 145 were erected in connection with new property, under supervision of the Surveyor's Department. There still remain in the Borough ²⁶³⁵~~5,016~~ midden ashpits and 714 pail closets, Many of the latter are so situated that conversion to the water carriage system is impossible owing to the absence of a sewer in the vicinity.

EFFECTS ON THE CLEANSING DEPARTMENT.—The above conversions are highly satisfactory from a public health point of view, but no material advantage results to the Cleansing Department as a result of these sporadic conversions; if, however, a whole street could be converted at one and the same time, distinct economic benefit would result. In some towns powers have been obtained under local Acts for the systematic conversion of insanitary conveniences to the water carriage system en bloc. These powers have material advantageous results, not only to the public health, but by a considerable saving being effected in the cost of removal of the contents of ashpits, &c. Whilst every conceivable variety of convenience obtains, as in Bury, administrative and economical difficulties in the satisfactory and sanitary removal of the contents of ashpits, pails, &c., will always exist.

COLLECTION OF WASTE PAPER.—During the past year, the collection of waste paper, cardboard, &c., from the various shops and offices within the Borough has been inaugurated, with a view to minimise the quantity of this class of refuse from being deposited in ashpits.

The system adopted is as follows:—Each shopkeeper is provided with a sufficient number of bags to hold a week's stock of paper, &c. The bags are 30 by 50 inches, and are made of good strong canvas, with the words "Bury Corporation, Cleansing Department" printed on one side. A covered lorry calls for the bags once a week, the contents of which are emptied on the lorry, and the bag returned to the shopkeeper. The paper, &c., is then conveyed to the Fernhill Yard, where it is screened and packed, ready for consignment to the paper works.

This new departure in the Cleansing Department has proved very successful, as upwards of 300 bags have been left at the various shops and offices, and the amount of paper, &c., which has been collected during the four months the system has been in operation is 30 tons, 11 cwt., 1 qr., which has realised over £30. The further extension of this system to private houses would, I think, prove successful.

SCAVENGING DEPARTMENT.

The work of scavenging has, as in the previous year, been carried on at a disadvantage, owing to the relaying of tramways. The number of loads of refuse collected and carted from the public streets was 3,705, as compared with 3,686 loads during 1903. Owing to the exceptionally mild winter, only 96 loads of snow were removed.

Street watering commenced on April 20th, and continued at intervals until September 27th. During this period 5,751 barrels of water, or approximately 2,012,850 gallons, were spread on the principal streets. This important branch of the work was somewhat impeded owing to the dry summer, the result being that water could not be obtained from the usual sources. A fairly good supply, however, was obtained from a well belonging to the Vulcan Mill.

The practice of putting men on the principal streets with hand-carts for the collection of stable refuse, paper, &c., has been continued during the year, with the result that the streets have presented a fairly clean appearance.

During the year a combined street watering and sweeping machine has been added to the plant in the Scavenging Department.

DUST-LAYING PREPARATION.

With a view of preventing and disturbance of dust in the streets, the Cleansing Committee authorised the purchase of a quantity of Calcium Chloride, with a view of preventing a frequent application of water to the streets surface, especially as water is so scarce in Bury during the summer. Sufficient opportunity was not afforded before the end of the year for pronouncing a verdict as to the value or otherwise of the preparation. Various other preparations are now on the market, and the problem of dust-laying is one to claim the serious consideration of every Scavenging Department, in view of the increase of rapid traffic (especially electric and motor) in our public streets.

PUBLIC URINALS.

The number of urinals at present in the Borough is 24, the same number as in the previous year. Each urinal in the centre of the town is washed out and disinfected twice daily, the remainder being cleansed once daily.

ANNUAL REPORT OF THE BOROUGH ANALYST.

54, ARCADE CHAMBERS, ST. MARY'S GATE,
MANCHESTER,

January 31st, 1905.

To the Chairman and Members of the Health Committee of
the Corporation of the County Borough of Bury.

Gentlemen,

In accordance with Section 19 of the Sale of Food and Drugs Acts, 1875, &c., I have pleasure in submitting to you reports upon the samples received during the quarters of the year 1904, together with a summary as to the contents thereof.

During the twelve months ending December 31st, 1904, your Inspector (Mr. H. C. Cass) has submitted to me 113 samples, as follows :—

	Genuine.	
Butter... ..	23,	of which 2 were adulterated.
Milk	51,	„ 2 „ „
Cheese... ..	6,	all genuine.
Lard	2,	„
Margarine	4,	„
Coffee... ..	7,	„
Spirits... ..	4,	„
Beer	6,	all genuine, and free from arsenic.
Pepper	6,	all genuine.
Sugar... ..	2,	„
Vinegar	1,	genuine.
Ground Ginger	1,	genuine.

113

It will be seen that the percentage of adulteration was equal to 3.54.

Prosecutions were taken in the above four cases, and convictions were obtained in the two butter cases, the fines being 20s. and costs in each case. In the two milk cases an “ appeal to the cow ” was made, with the result that the cases were dismissed.

I remain, Gentlemen,

Your obedient Servant,

THOS. J. HUTCHINSON,

Public Analyst, County Borough of Bury.

INSPECTION OF CANAL BOATS.

PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY,

January 13th, 1905.

To the Medical Officer of Health.

Dear Sir,

CANAL BOATS ACTS, 1877 and 1884.

I herewith present to you this report upon the working of these Acts within the district of the Bury Urban Sanitary Authority for the year ending December 31st, 1904.

No increase of the traffic over the last year's report has to be mentioned, as only three boats coming under these Acts have visited the wharf. These boats were inspected, and were found in a satisfactory condition.

His Majesty's Chief Inspector of Canal Boats visited the town on January 27th, 1904, and the books, &c., were examined.

The small number of boats inspected is not due to any neglect in visiting the canal. A call is made every day by a man in this Department, and frequent visits are also made by myself when in this district, and the three boats inspected are the only boats visiting the canal this year.

I am,

Yours obediently,

SAMUEL KAY,

Sanitary Inspector.

REPORT OF NURSE WALTON,

HEALTH DEPARTMENT,

PARSONS LANE, BURY,

May, 1905.

To the Chairman and Members of the Health Committee.

Gentlemen,

I beg to submit the following Report of my work during the year 1904 :—

1,268 visits have been paid to houses in which births have been registered, advice given as to feeding, &c., where thought necessary.

780 houses visited in which cases of suspected measles, whooping cough, ringworm, ophthalmia, &c., existed.

202 visits to reported cases of phthisis; spittoons lent, refills and sanitary handkerchiefs given when needed. After the occurrence of death from phthisis, I have advised the occupier of the house to have the room in which the patient had been isolated disinfected, and it is pleasing to record that in the majority of cases the advice has been accepted.

Four cases of puerperal fever visited, and necessary disinfection advised.

80 workrooms where women only are employed have been inspected.

I remain, Gentlemen,

Yours obediently,

L. E. WALTON.

REPORT OF INSPECTOR HAWORTH, INSPECTOR OF NUISANCES.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have pleasure in submitting to you the following Report of the work done in the Sanitary Department during the past year. Probably the most satisfactory feature in this Report is the number of privy closets which have been converted to the water carriage system. From the table it will be seen that 361 closets on this system have been converted. About two-thirds of this number have been altered without taking the old structures down, the privy middens being altered to form dry ashpits, whilst the remainder, on being pulled down, were reconstructed on the most modern lines, dry ashbins being provided in lieu of ashpits. An additional 37 water closets have also been provided. In nearly every case the whole of the drains have been taken up and relaid. The total cost of carrying out this work borne by the property owners may be roughly estimated to amount to £2,450, and to the Corporation about £750. In the carrying out of this work your Inspectors have spent a considerable amount of time, as the drains are not allowed to be covered up until the same have been examined, the number of visits made being 923. I consider this branch of the work will meet with your approval, not only from the public health point of view, which, in my opinion, is unquestionable, but from an economical point as regards the Cleansing Department. Of the 361 privy closets converted, 70 were privy pails, and there were also nine tanks. The clearing away of these may be estimated as a saving of about £45 per year, with the conversion of the ordinary privy middens (the middens being altered to dry ashpits). The contents of privy middens weigh about 58lbs. to the cubic foot, the refuse from dry ashpits about 47-lbs., so we have a decrease in weight of 11-lbs. per cubic foot. This decrease in weight, coupled with the advantages of loading, and by the nature of the refuse (carrying), has enabled the Cleansing Committee to substitute vehicles of $3\frac{1}{2}$ cubic yards' capacity in place of those of $1\frac{1}{2}$ cubic yards, and as each house

provides about 52 cubic feet of refuse per annum, I estimate that the saving is equal to clearing away one house in every four altered.

	Year—1904.	1903.	1902.	1901.	1900.	1899.	1898
Water Closets... ..	191	107	107	118	137	71	76
Waste Water Closets..	199	120	159	14	27	64	54
	390	227	266	132	164	135	130

INFECTIOUS DISEASES.

In referring to the table of visits made by your Inspectors it will be seen that 535 visits have been paid to cases of infectious diseases. On the receipt of the notification of a case from the Medical Officer of Health, your Inspectors visit the house and examine the sanitary condition of same, as well as making the necessary enquiries as to the cause of the disease, and the means of isolation. Should the case be removed to the hospital, disinfection of the house, bedding, and clothing of the patient is immediately carried out. In the case of Smallpox, the persons who have been in contact with the patients are visited, their clothes disinfected, and advice given as to vaccination. Forms are filled up relating to each respective disease, and handed to the Medical Officer, who gives us further instructions if needful.

COMMON LODGING-HOUSES.

609 visits have been made to the 14 Common Lodging-Houses within the Borough. Fortunately no cases of Smallpox have occurred in these houses; and I am pleased to say no cases of overcrowding have occurred; in fact, it is most satisfactory to note that they are seldom full, and, therefore, a little more breathing space is provided. The houses have been kept fairly clean, the limewashing being regularly carried out at the respective times mentioned in Section 82 of the Public Health Act, 1875.

HOUSES LET IN LODGINGS.

The houses have been periodically visited, and no cases of overcrowding have been found. Owing to these houses not being registered, a large number of them are unknown to your Inspectors, but the houses that are known are kept fairly clean. It was found necessary, however, in one case to caution the tenant as to its condition.

EXPLOSIVES ACTS.

Thirty-four persons were registered for the sale of explosives during the year, thirty being for the sale of fireworks only, and four for the sale of gunpowder and other explosives. Owing to the restrictions placed on the sale of fireworks, there are seven persons less on the register this year, these restrictions being that all fireworks must be kept in a wood or metal box, provided with a proper lock and key, only dummy fireworks having to be exposed, the custom of exposing fireworks under a glass cover not being allowed. During the months of October and November the shops were visited by your Inspectors and the police. Information was received during the month of December as to a small firework (the contents of which were very explosive) being found in the Market, the same having been prohibited. There were none found in the Borough.

PETROLEUM ACTS.

Under these Acts five licences have been granted for the keeping of petroleum, two for petrol, and three for the keeping of calcium carbide. Two works within the Borough making their own acetylene gas, the manufacture of same appears to be carried on under safe conditions.

SHOP HOURS ACT.

Sixty-two visits have been made to shops under these Acts. The hours employed appear to be well within the number specified in Section 3 of the 1892 Act, *e.g.*, 74 hours, including meal times, in any one week. However, the notices required to be exhibited by Section 4 were, in most shops, absent. I understand notices are in course of preparation, and will then be provided to the shopkeepers on application.

SMOKE OBSERVATIONS.

During the year only ten observations of the chimneys in connection with factories were made, the results being reported to you, which were as follows :—

Initials of Firm.	Black.		Moderate.		None.	
	M.	S.	M.	S.	M.	S.
*S. & C. & P. B	15	0	18	30	26	30
W. & I.	6	30	20	30	30	0
Exors. of T. B.	—		47	30	12	30
E. C. D. & Co.	2	0	16	0	27	0
H. & Co. ..	4	30	10	30	15	0
*W. R. & Co.	10	5	15	30	34	25
*B. & H.	12	50	24	0	23	10
J. K. S. & Co.	4	30	41	30	14	0
A. A. & Sons.	1	15	15	45	43	0
B. C. Co.	4	30	17	40	37	50

*Statutory Notices were served on these firms to abate the nuisance. It is to be regretted that this important branch of work appears at first sight to have been somewhat neglected, but this apparent neglect is accounted for in the time taken up by your Inspectors in the examination and testing of house drains and sanitary fittings (on referring to table, it will be found that 122 visits were made in connection with same). Another important factor was the irregularity of the working of the factories within the district, many of which, on account of the slackness of trade, only worked part time the greater portion of the year. Your Inspectors, however, called at the works when such emissions were noticed, and cautioned the offenders, which in most instances had the desired effect.

NOTICES.

Nine Legal Notices were served during the year in connection with the following matters :—

Four to abate smoke nuisance.

Two to abate insanitary privy middens in connection with factories.

One to abate insanitary privy middens in connection with dwelling-house.

One to abate insanitary water closet in connection with dwelling-house.

One to abate insanitary drains in connection with dwelling-house.

It has been found unnecessary to take any legal proceedings requiring the abatement of nuisances.

Number of Preliminary Notices served	252
„ Letters in lieu of Notices served	170
„ Letters other than Notices served... ..	220
„ Special Reports re Sanitary Houses	14
„ Factory Inspectors' Notices served... ..	38
„ Notices served on Occupiers... ..	18

The following table gives particulars of nuisances occurring in which Notices have been served :—

Number of Notices.	NUISANCE.		Houses Affected.
144	352	Foul privies and ashpits... ..	538
13	26	Defective pail closets... ..	36
29	45	Ashpits without proper doors	94
7	—	Insufficient closet accommodation... ..	21
7	7	Privy middens to cleanse (in added areas).	16
18	22	Waste and fresh water closets out of order	27
15	17	Defective soil pipes and sanitary fittings..	15
30	33	Defective rain water pipes and eaves troughing	44
54	91	Defective and untrapped drains	97
68	102	Choked drains	116
15	19	Defective pavements in back yards	32
2	—	Defective pavement in back street	—
8	11	Dilapidated and damp houses	11
12	13	Premises to cleanse	13
2	2	Houses overcrowded... ..	2
20	21	Offensive accumulations... ..	—
3	3	Animals kept as to be a nuisance	5
4	—	Smoke issuing from chimneys (other than dwelling-houses) in such a manner as to be a nuisance	—
2	—	For obstructing light and ventilation... ..	2
11	57	Street grids choked	—
464	821		1064

The difference between the figures (464) in the above table and the number of Notices served (by 422) is accounted for by having specified in the notice each particular nuisance requiring abatement in connection with the house under notice.

SUMMARY OF VISITS.

Infectious Diseases	535
Common Lodging-houses	609
Houses let in Lodgings	74
Drains dilapidated and untrapped... ..	476
Offensive Privy Middens... ..	494
Waste and Fresh Water Closets... ..	152
Testing Drains and Sanitary Fittings	122
Work in progress	923
Factories and Workshops	68
Houses to Cleanse... ..	17
Accumulations of Refuse	27
Animals kept as to be a Nuisance	7
Smoke Nuisances... ..	13
General Dilapidations... ..	4
Canal Boats and Wharf... ..	8
Other Nuisances	366

Sanitary improvements carried out in pursuance of Inspections made and Notices served :—

FACTORIES AND WORKSHOPS.

FACTORY OR WORKSHOP.	NUISANCE.	MANNER OF ABATEMENT.
B. C. S. Co. Ltd., Barnbrook Mill.	Insanitary privy closets, consisting of 6 privy closets on the tower system, con- nected to a tank, and 3 pail closets.	Privies, pails, and tank cleared away, and 10 w.c.'s substituted.
Hardman's, Huntley Brook. Worsley's, Fountain St.	No closet accommoda- tion. Insanitary privy closets, consisting of 4 privy closets and tank.	2 w.c.'s provided. Old privies taken down and cleared away. New closets built, fitted with 2 sets of isolated latrines for 5 and 3 seats respec- tively.
Perham's, Knowsley St. Peers, Brooksmouth Mill.	Insufficient closet ac- commodation. Insanitary privy closets, consisting of 8 privy closets, con- nected to a tank.	1 w.c. provided. 2 additional closets built, and 2 sets of isolated latrines, for 6 and 4 seats respec- tively, have been pro- vided.
W. R. & Co., Alexandra Mill.	Insanitary privy closets, consisting of 2 blocks of privy closets for 8 seats, connected to tank.	Old closet pulled down. tank cleared away, and 3 blocks of new closets built and fitted with 3 sets of isolated latrines, for 6, 6, and 4 seats respectively.
Baker St. Mill Co.	Insanitary privy closets, consisting of 4 privy closets and tank.	Tank filled up and 5 w.c.'s fixed, an addi- tional w.c. being pro- vided.
Corporation Gas Office.	Insanitary privy closet with tank.	Tank cleared out, and 2 w.c.'s provided.
Victoria Works, South Cross Street.	Insanitary pail closets.	Pail closets done away with, and 2 w.c.'s provided.
Trafalgar Mill.	Insanitary privy closets, consisting of 2 blocks of privy closets for 6 seats, with tank.	Tank filled up, and 2 sets of isolated latrines, for 4 and 2 seats, fixed respec- tively.
W. & I., California Mill.	Insanitary privy closets, consisting of 2 blocks of privy closets for 7 seats, connected to tank.	Old privy closets taken down. New closets built and fitted with 2 sets of isolated latrines, for 5 and 3 seats respectively.

FACTORIES AND WORKSHOPS.—*Continued.*

FACTORY OR WORKSHOP.	NUISANCE.	MANNER OF ABATEMENT.
Bury Corporation Gas Works.	Insanitary pail closets.	Pail closets cleared away, and 1 set of trough closets for 5 seats provided.
S. Renshaw & Sons, York Street Mill	Insanitary privy closets on the tower system, connected to tank.	Privy closets and tank cleared away, and 3 w.c.'s fixed.
S. Smethurst, Woolfold.	Insufficient accommoda- tion and insanitary privy closets.	Old privies cleared away and 4 water closets fixed.
SCHOOLS.		
Brunswick, North St.	Insanitary privy closets	2 w.c.'s provided.
Chesham British.	Insanitary pail closets.	2 sets of isolated latrines, for 5 and 3 seats respectively, fitted.

The isolated closets that have been fixed are of the most modern pattern, and appear to give every satisfaction. Inspection chambers have been built for easy access in cases of obstruction.

DWELLING-HOUSES AND OTHER PREMISES.

Privy closets converted to fresh water closets... ..	122
Privy closets converted to waste water closets	169
Pail closets converted to fresh water closets... ..	41
Pail closets converted to waste water closets	29
Additional fresh water closets	28
Additional waste water closets	1
Privies and privy middens repaired or modified... ..	84
Ashbins provided in lieu of ashpits	85
Privy middens altered structurally and converted to dry ashpits	122
Additional ashpits and bins provided	8
Houses cleansed and limewashed	8
Houses in which repairs to plastering, brickwork, or woodwork have been carried out	6
Cellars redrained or drains taken out	11
Houses without eaves, troughing, or with choked or defective spouting. New spouting and troughs provided, or existing spouting cleansed and repaired... ..	27

Surface paving in yards repaired	12
Choked drains unstopped and cleansed... ..	72
Defective and brick drains taken out. New stone- ware drains laid and trapped... ..	43
Sanitary fittings repaired or renewed	21
W.C.'s or soil pipes repaired or renewed	14
Foul accumulations removed	9
Animals and fowls removed	4
New drains provided to urinals and trapped	2
Cases of overcrowding removed	2
Other sundry nuisances abated	35

One of the most common nuisances which occurs arises from broken rain-water spouts. These spouts are mostly connected direct to the drain or connected to a small P trap, without dish-brick, the consequence being that the dirt from the roof, in addition to the rust from the iron spouting, collects in the bend or in the trap, choking same, the bottom portion of the pipe being then charged with water, and on the appearance of frost at once breaks or cracks the pipes, through the expansion of the water in freezing, and when thawed the water trickles down the outside of the pipe into the foundations, causing the house to be damp. When the joint connecting the R.W.P. to the trap is defective, the same is not found out until the house shows dampness. This nuisance should be obviated by causing all R.W.P. to empty in the open air into properly laid channels, or gully traps.

In conclusion, I wish to express my sincere thanks to Inspector Kay for the able services which he has always most willingly rendered me in the carrying out of the work embodied in this report, and also to thank you for your kind consideration.

I am, Gentlemen,

Your obedient Servant,

JOHN HAWORTH, A.R.S.I.

Certified Inspector of Nuisances, and
Sanitary Engineer.

REPORT OF MEAT INSPECTOR.

PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY.

May, 1905.

*To the Chairman and Members of the Health Committee of
the County Borough of Bury.*

Gentlemen,

I have pleasure in submitting to you my Report for the year ending December 31st, 1904, on the inspection of meat, dairies, cowsheds, bakehouses, &c.

During the past year, the various animals, carcasses, &c., passing through the Public Abattoirs have been carefully inspected both when alive and post-mortem, and, speaking generally, the class of meat retailed in the Borough has been of a high standard, and fully equal to that of the past few years.

During the year it was found necessary to pay special attention to 58 carcasses, of which number 41 were affected with tuberculosis in varying degrees. These consisted of 21 cows, four heifers, seven bullocks, one calf, and eight pigs. The remaining seventeen were variously affected, as will be seen from the appended table.

Of the cattle affected with tuberculosis, it was not found necessary in any instance to destroy the entire carcase, although in three instances considerable portions of the carcase were destroyed, as well as the whole of the internal organs, while the remainder were carefully stripped, and such of the internal organs as proved to be diseased were destroyed.

Of the eight pigs found to be affected, four entire carcasses were destroyed, in each of which the disease was of a generalised character, while in the remainder, the disease being confined to the head and internal organs only, and the carcasses being well nourished and of excellent quality, it was deemed necessary to destroy the heads and affected organs only.

It was also found necessary to condemn and destroy the following, viz. : The carcasses and all organs of two pigs, owing to acute inflammation of lungs, as also the carcasses of four sheep, each of these being found dead.

In two instances of sheep being found dead, there is every reason to believe that they were without doubt affected with Anthrax, although a microscopical examination failed to demonstrate the presence of the bacillus anthracis in the blood, the whole history and manner of death, as well as the anti-mortem and post-mortem examination of the carcasses pointed unmistakably to Anthrax.

In each of the foregoing cases, the carcasses were destroyed with every precaution, thorough disinfection carried out in the lairs, slaughter-houses, and in all places where it was likely the sheep had been, while the contact animals were kept in quarantine for eleven days, no further outbreak occurring. These were afterwards slaughtered under observation, and found to be perfectly healthy.

In three instances, sides of beef have been found containing abscesses in the lumbar fat; these, and the surrounding tissues, being carefully removed and destroyed, the same procedure being adopted when a carcase was found with an abscess in the throat.

On two occasions I have been called upon to inspect carcasses slaughtered in emergency upon farms in the Borough; in one of these cases the animal (a cow) was slaughtered owing to an apoplectic seizure, and being well bled, firm and normal in character, was passed as fit for food. The other (a pig) was found to have suffered from acute inflammation of both lungs, the condition of the carcase, which was poor and almost devoid of fat, was suggestive of the near cause of death, and consequently the carcase and all organs were condemned and removed to the Destructor at Fernhill and destroyed.

Enforced slaughter has also been necessary in several instances in the Abattoirs, in each case slaughter being undertaken sufficiently early to enable the carcase being passed as fit for food. In one of these instances slaughter was necessary owing to some person or persons having brutally illtreated a pig by heavily striking it with a hammer, this causing a considerable portion to be cut to waste, and the conversion into lard of what otherwise would have been salted for bacon.

The following organs have also been destroyed, viz.: 26 beast livers, eight sheep livers, eight pig livers, nine beast lungs, four sheep lungs, three pig lungs, one beast's kidney, one pig kidney, and two beast lungs, these being variously affected.

One butcher was warned during the year for removing a diseased beast liver from the Abattoirs, this being returned and destroyed.

In every instance where the extent or nature of the disease has rendered the carcase doubtful, it has been reported to the Medical Officer of Health, and his advice sought thereon, this necessitating the attendance of the Medical Officer on several occasions.

During the same period the butchers' shops, fish shops, &c., have been constantly kept under supervision, regular and frequent visits having been made to the same; the meat, fish, &c., coming under observation having been, with few exceptions, very satisfactory in quality.

During the year my attention has been invited to various articles of food received in an unsound condition, these comprising a hind-quarter of frozen beef, a quantity of frozen mutton (172-lbs.), spoiled owing to adverse weather, a small quantity of home-killed beef, a barrel of pigs' maws, &c., &c., these being removed to Fernhill and Destroyed.

I have again to thank the various tradesmen with whom my duty brings me in contact, for the courtesy they have invariably extended to me, and the readiness with which they have complied with any suggestions as to the destruction of diseased or unsound food.

CARCASSES TO WHICH SPECIAL ATTENTION WAS NECESSARY.

No. of Carcase.	Description	Disease.	Extent of Disease.	How disposed of.
1	Pig.....	Acute Fever ...	—————	Carcase and all organs destroyed.
2	Pig.....	Congestion of lungs	Slight	Carcase passed, lungs, heart and liver destroyed
3	Cow ...	Tuberculosis ...	Pleura and Peritoneum (one side slight)	Stripped and lungs destroyed
4	Pig.....	Damaged.....	Both hams	Damaged portions remov'd
5	Sheep	Trampled	—————	Damaged portions remov'd and remainder passed
6	Bullock	Lungs adherent	—————	Pleura stripped
7	Sheep.	Died	—————	Carcase and all organs destroyed
8	Pig.....	Pleurisy and diseased liver	Slight	Pleura stripped, lungs, liver, and spare ribs destroyed
9	Bullock	Tuberculosis ...	Lungs and Pleura (slight) ...	Pleura stripped, lungs and liver destroyed
10	Cow ...	„ ...	One Lung, one Pleura	Pleura stripped and lungs destroyed
11	Cow ...	„ ...	Pleura (slight)	Pleura stripped and lungs destroyed
12	Bullock	„ ...	Lungs and Pleura (slight) ...	Pleura stripped, and lungs and diaphragm destroy'd
13	Cow ...	„ ...	Peritoneum (slight)	Peritoneum stripped, liver, spleen and diaphragm destroyed
14	Cow ...	„ ...	Pleura and Peritoneum	Necks, briskets, and all internal organs destroyed
15	Bullock	„ ...	Pleura (slight)	Stripped and lungs destroyed
16	Cow ...	„ ...	Peritoneum.....	Peritoneum stripped, and diseased internal organs destroyed
17	Pig.....	Inflammation of lungs	—————	Carcase and all organs destroyed
18	Cow ...	Tuberculosis ...	Pleura & Peritoneum (slight)	Stripped and diseased organs destroyed
19	Calf ...	„ ...	Slight on Omentum.....	Diseased organ destroyed
20	Bullock	„ ...	Slight on Pleura	Stripped
21	Cow ...	„ ...	„ „	„
22	Bullock	„ ...	Pleura and Peritoneum	Sternum and all internal organs destroyed
23	Pig... ..	Lungs adherent (heal'd pleurisy)	Slight	Pleura stripped and lungs destroyed
24	Pig.....	„ ...	„	Pleura stripped and lungs destroyed
25	Cow ...	Tuberculosis ...	Slight on one Pleura	Stripped and lungs destroyed
26	Cow ...	„ ...	Pleura and Peritoneum	Sternum and all internal organs destroyed
27	Bullock	Pericarditis ...	—————	Heart and diaphragm destroyed
28	Bullock	Abscess in lung & lung adher't	—————	Lungs destroyed & pleura stripped

CARCASSES TO WHICH SPECIAL ATTENTION WAS NECESSARY.—*Con'd.*

No. of Carcase.	Description.	Disease.	Extent of Disease.	How disposed of.
29	Cow ...	Tuberculosis ...	Slight on Peritoneum	Stripped, diaphragm, spleen, and one foot (abscessed) destroyed
30	Heifer	„ ...	Slight on Pleura and Peritoneum	Stripped and diseased internal organs destroyed
31	Cow ...	„ ...	Slight on one Pleura	Stripped
32	Heifer.	„ ...	Slight on Pleura	Pleura stripped
33	Pig.....	„ ...	Generalised	Carcase and all organs destroyed
34	Pig.....	„ ...	Head, Lymphatic Glands ...	Head destroyed
35	Cow ...	„ ...	Slight on Pleura	Pleura stripped and lungs destroyed
36	Cow ...	„ ...	Slight one Lung and Pleura	Stripped and lungs destroyed
37	2 Pigs .	„ ...	Head, Lymph Glands.....	Heads destroyed
38	Cow ...	„ ...	Pleura and Peritoneum	Stripped and diseased organs destroyed
39	Cow ...	„ ...	„ „	Stripped and diseased organs destroyed
40	Cow ...	„ ..	Slight on Peritoneum	Stripped and diseased organs destroyed
41	Pig.....	„ ...	Head, Lymphatic Glands ...	Head destroyed
42	Heifer.	„ ...	Slight on Pleura	Stripped
43	Pig.....	„ ...	Generalised	Carcase and all organs destroyed
44	Bullock	„ ...	Pleura and Peritoneum	Stripped
45	Cow ...	„ ...	Slight on one Pleura	„
46	Bullock	„ ...	Slight on one Peritoneum ...	Stripped, diseased organs destroyed
47	Sheep..	Died	—————	Carcases and all organs destroyed
48	2 Pigs	Tuberculosis ...	Generalised	Carcase and all organs destroyed
49	Pig.....	Moribund	—————	Carcase passed, internal organs and head destroyed
50	Cow ...	Tuberculosis ...	Lungs (slight)	Lungs destroyed
51	Cow ...	„ ...	Slight on Pleura	Stripped
52	Heifer.	„ ...	„ „	Stripped, lungs and diaphragm destroyed
53	Sheep..	Suspected Anthrax	—————	Carcase and all organs destroyed
54	Cow ...	Tuberculosis ...	Slight on Pleura and Peritoneum	Stripped, lungs, liver, spleen and diaphragm destroyed
55	Heifer.	Chronic Rheumatism	One hind and one fore leg ...	Portions affected destroy'd
56	Sheep..	Suspected Anthrax	—————	Carcase and all organs destroyed

F A R M S .

168 visits have been paid to the various farms in the Borough, of which there are 64, two having ceased to be used as cowsheds, while one new cowshed has been built and occupied.

Steady progress has been made towards bringing the cowsheds into better sanitary conditions, several farms having undergone extensive alterations, especially as regards the increase of cubic capacity, the lighting, ventilation, drainage, and cleansing; a short summary of these alterations is given below :—

CLOSE'S FARM, FAIRFIELD.—The alterations at this farm comprise the raising of ceiling of cowshed from 7ft. to 9ft., the provision of four inlet and outlet ventilators, two additional opening windows, new brick floor for stalls, with open channel and paved passage behind cattle, and open passage 3ft. wide in front of cattle, the whole being laid on concrete, and grouted with cement. Removal of drain opening from within cowshed, and substitution of trapped gulley outside cowshed, and stoneware pipe drains connected to new liquid manure tank, and the enclosing of manure heap by wall and concreting of same. Formerly this farm had less than 350 cubic feet for each cow, while the floor was badly paved and unprovided with any sort of channel for the removal of liquid.

CHEETHAM'S FARM.—Two drain inlets removed to outside, and additional ventilation provided.

TOUCH ROAD FARM (G. Eastham's.)—Construction of cellar dairy—entailing the construction of area and steps outside, with entrance, and opening window for cross ventilation, with open channel for drainage.

BANKS FARM.—New pipe drains, properly trapped from house and cowsheds, discharging into tank.

GOSCHEN FARM.—Two untrapped drain openings of house properly trapped, &c.

LOWER BRANDLESOME FARM.—At this farm one cowshed has been constructed out of what were formerly stables and old shippens (for this purpose the ceilings have been raised, four additional opening windows provided, new floors to stalls, and an efficient channel discharging into trapped gulley situate outside cowshed). Two buildings have also been erected for the purpose of isolating calving cows or sick cattle, &c., and the whole system of drains put into proper sanitary condition.

During the year twelve applications have been received under section 6 of the Dairies, Cowsheds, and Milkshops Orders, 1885-6, this bringing the present number of persons registered to 84 who carry on the business of cowkeeper or purveyor of milk.

In two instances cowkeepers have been warned against the practice of keeping pigs in cowsheds.

BAKEHOUSES.

The bakehouses, of which there are 87, have been kept under observation, and, generally speaking, they have been carried on in a satisfactory manner.

In several instances, however, it has been necessary to serve notices for the removal of drain openings therefrom, four of these being removed during the year.

It was also found necessary to call the occupiers' attention to the requirements of the Factory and Workshop Acts re exhibiting the Abstract.

One occupier was warned against using a cellar in contravention of section 101 of the Act of 1901.

One licence for the use of a cellar as a bakehouse has been granted (a report having been presented thereon) subject to certain alterations, which were duly carried out.

OFFENSIVE TRADES.

290 visits have been paid to the Offensive Trade establishments in the Borough. On one or two occasions complaints have been received of offensive odours given off from these premises; these being due to the fat being in a semi-putrid condition on being received. In other respects these establishments have been carried on in a satisfactory manner.

ICE CREAM SHOPS.

These have been kept under observation, there being no cause of complaint.

KNACKER'S YARD.

133 visits have been paid to the Knacker's Yard, which has been carried on with as little nuisance as possible, having regard to the nature of the business.

On one occasion, however, the owner was warned re the accumulation of offensive meat, bones, &c.

The returns from the Knacker's Yard are:—161 cows and 304 horses.

Of the cattle 65, or 40.37 per cent., were returned as being affected with tuberculosis; 77, or 47.83 per cent. as due to some form of inflammation; and 19, or 11.80 per cent., to various causes.

I am, Gentlemen,

Your obedient servant,

W. P. OPENSHAW, Assoc. San. Inst.,

Cert. Insp. Meat and other Foods.

APPENDIX A.

SUMMARY OF DEATHS, 1904.

DISEASES.	AGES.														ALL AGES.
	0	1	5	10	15	20	25	35	45	55	65	75	85		
Small-pox (a) Vaccinated	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
(b) Unvaccinated	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
Measles	8	19	..	..	..	..	..	..	..	..	..	..	..	27	
Scarlet Fever	..	4	5	..	..	..	..	1	..	..	..	..	..	10	
Epidemic Influenza	..	..	..	..	1	..	1	1	3	2	2	1	..	11	
Whooping Cough	18	24	..	..	..	..	..	..	..	..	..	..	..	42	
Diphtheria	..	5	2	..	..	..	..	..	..	..	..	..	..	7	
Enteric Fever	..	..	..	1	3	..	2	1	..	..	..	..	..	7	
Diarrhoea, Dysentery	32	6	..	..	..	..	..	1	..	1	1	..	..	41	
Epidemic Enteritis	4	..	..	..	..	..	..	..	..	..	..	..	..	4	
Cowpox	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
Syphilis	8	..	..	..	..	..	..	..	..	..	..	..	..	8	
Puerperal Fever	..	..	..	..	..	1	1	..	..	..	..	..	..	2	
Pyæmia	..	..	1	..	..	..	..	..	..	..	..	..	..	1	
Stomatitis	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
Rheumatic Fever	..	..	1	..	..	..	..	..	..	..	..	..	..	1	
Rheumatism of Heart	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Tuberculosis of Brain	4	7	..	1	1	..	..	1	..	..	..	..	..	14	
Phthisis	2	2	1	5	6	5	22	25	16	10	3	..	..	97	
Abdominal Tuberculosis	10	4	1	2	..	..	..	..	..	..	..	..	..	17	
General Tuberculosis	2	..	1	..	1	1	1	..	..	..	1	..	..	7	
Other forms Tuberculosis	..	1	1	..	..	2	1	1	..	..	..	..	..	6	
Acute Alcoholism	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Chronic Alcoholism	..	..	..	..	..	..	..	1	1	..	..	..	..	2	
Plumbism	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Cancer	..	..	..	..	..	..	..	8	13	14	4	2	..	41	
Diabetes Mellitus	..	..	..	..	1	..	1	1	3	2	4	..	..	12	
Anæmia	..	..	..	..	..	..	2	1	1	1	..	..	..	5	
Premature Birth	26	..	..	..	..	..	..	..	..	..	..	..	..	26	
Injury at Birth	2	..	..	..	..	..	..	..	..	..	..	..	..	2	
Debility at Birth	12	..	..	..	..	..	..	..	..	..	..	..	..	12	
Atelectasis	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
Cyanosis	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
Congenital Defects	3	1	..	..	..	..	..	..	..	..	..	..	..	4	
Want of Breast Milk	23	..	..	..	..	..	..	..	..	..	..	..	..	23	
Atrophy, Debility, Marasmus ..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
Dentition	3	5	..	..	..	..	..	..	..	..	..	..	..	8	
Old Age, Senile Decay	..	..	..	..	..	..	..	..	..	2	20	36	15	73	
Convulsions	13	5	..	..	..	..	..	..	..	..	..	..	..	18	
Meningitis	4	2	2	..	..	..	..	2	..	1	..	..	..	11	
Encephalitis	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
Apoplexy	..	..	..	..	1	..	..	1	7	10	10	5	..	34	
Softening of Brain	..	..	..	..	..	..	..	..	1	..	1	1	..	3	
General Paralysis of Insane ..	..	..	..	..	..	..	2	1	1	1	..	..	..	5	
Other forms of Insanity	..	..	..	..	..	..	..	1	..	1	..	..	..	2	
Cerebral Tumour	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Epilepsy	..	..	..	1	..	1	..	1	1	..	1	..	..	5	
Locomotor Ataxy	..	..	..	..	..	..	..	..	..	..	1	..	..	1	
Paraplegia	..	..	..	..	..	..	..	2	1	1	2	..	..	6	
Paralysis Agitans	..	..	..	..	..	..	..	..	..	..	1	..	..	1	
Multiple Neuritis	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Other forms, Brain Diseases ..	1	1	..	..	2	..	..	..	..	..	..	..	..	4	
Otitis	1	..	..	1	..	..	..	..	..	..	..	..	..	2	
Endocarditis	..	1	1	1	..	1	1	..	4	..	1	1	..	11	
Angina Pectoris	..	..	..	..	..	..	..	1	..	1	..	..	..	2	
Aneurism	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Senile Gangrene	..	..	..	..	..	..	..	..	..	1	1	1	..	3	
Embolism, Thrombosis	..	..	..	..	..	..	..	..	..	1	2	..	..	3	
Arterial Degeneration	..	..	..	..	..	..	..	..	..	2	..	1	..	3	
Cardiac Disease	..	..	1	1	1	1	4	4	2	11	5	1	1	31	
Other Diseases, Heart & Vessels.	1	..	1	..	..	1	2	4	6	10	9	1	1	36	
Laryngitis	..	2	..	..	..	..	..	..	..	..	..	..	..	2	
Croup	..	1	..	..	..	..	..	1	..	..	..	..	..	2	
Septic Pharyngitis	..	1	..	..	..	..	..	..	..	..	..	..	..	1	
Other Diseases, Larynx & Trachea	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Acute Bronchitis	24	13	2	2	..	1	..	..	3	2	3	2	..	52	
Chronic Bronchitis	..	..	..	..	..	..	..	1	8	25	25	7	..	66	
Lobar Pneumonia	3	..	..	..	..	..	..	1	..	..	..	..	..	4	
Totals	208	105	19	16	17	14	42	64	76	99	97	59	17	833	

SUMMARY OF DEATHS, 1904—Continued.

DISEASES.	AGES.														ALL AGES.
	0	1	5	10	15	20	25	35	45	55	65	75	85		
Totals brought forward..	208	105	19	16	17	14	42	64	76	99	97	59	17	833	
Lobular Pneumonia.....	4	8	..	..	..	..	..	..	..	1	..	..	..	13	
Pneumonia	5	2	2	2	1	5	3	3	7	6	5	..	..	41	
Pleurisy	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
Fibroid Phthisis	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
Ulcer of Stomach and Duodenum	..	..	..	..	..	1	..	1	1	1	..	..	..	4	
Other Diseases of Stomach	4	1	..	..	..	..	..	..	..	1	1	..	..	7	
Enteritis	1	..	..	..	..	..	..	..	..	..	1	..	..	2	
Appendicitis	..	..	1	..	..	..	1	1	..	..	1	..	..	4	
Obstruction of Intestine	..	..	..	..	..	..	1	1	1	6	1	..	..	10	
Other Diseases of Intestine	..	..	..	..	..	..	..	..	2	3	..	..	..	5	
Cirrhosis of Liver	..	..	..	..	..	..	..	1	3	2	2	..	..	8	
Other Diseases of Liver	1	1	..	..	..	..	..	..	..	1	2	..	..	5	
Peritonitis	1	..	..	..	..	1	..	2	..	1	..	..	..	5	
Acute Nephritis	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
Bright's Disease	..	..	..	..	1	2	2	4	3	..	1	..	..	13	
Diseases of Bladder & Prostate..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
Diseases of Ovaries	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
Diseases of Uterus and Append- ages	..	..	..	..	..	..	1	2	..	..	..	..	..	3	
Abortion, Miscarriage.....	..	..	..	..	..	1	..	..	..	..	..	..	..	1	
Puerperal Convulsions	..	..	..	..	1	3	..	..	..	..	..	..	..	4	
Other Diseases, Pregnancy and Childbirth.....	..	..	..	..	..	..	1	..	..	..	..	..	..	1	
Arthritis, Ostitis, Periostitis ..	..	..	..	..	..	..	..	1	..	2	1	..	..	4	
Ulcer, Bedsore	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
Accidents and Negligence :															
In Vehicular Traffic.....	..	1	..	..	..	..	2	..	..	1	..	..	..	4	
By Machinery.....	..	..	..	..	..	..	1	2	1	..	..	..	..	4	
By Weapons and Implements ..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
Burns and Scalds	..	5	1	..	..	..	1	..	..	..	..	..	..	7	
Poisons, Poisonous Vapours	..	..	..	..	1	..	..	..	..	..	..	..	..	1	
Drowning	1	..	2	..	..	..	1	..	..	..	..	..	..	4	
Suffocation, Overlaid in Bed ..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	
Suffocation, Otherwise	..	..	..	..	..	..	..	..	..	1	..	..	..	1	
Falls not specified	..	..	..	..	..	..	..	..	1	..	2	..	..	3	
Suicides :															
By Poison	..	..	..	..	..	1	2	..	..	..	..	..	..	3	
By Drowning	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
By Cut or Stab	..	..	..	..	..	..	1	..	..	..	..	1	..	2	
Ill-defined & Unspecified Causes	..	..	..	..	..	..	..	..	..	..	1	1	..	2	
Grand Totals.....	226	123	25	18	24	30	59	83	96	126	115	61	17	1003	

APPENDIX B.

COPY OF RETURN SUPPLIED TO THE LOCAL
GOVERNMENT BOARD.

BOROUGH OF BURY.—Return of the number of cases of Infectious Disease reported to the Medical Officer of Health during the year 1904, and of deaths from the diseases notified.

	Cases Notified in 1904.	Deaths Registered in 1904.
Smallpox	25	2
Scarlet Fever	261	10
Diphtheria	68	} 7
Membranous Croup	5	
Typhus Fever	—	—
Enteric or Typhoid Fever	22	7
Continued Fever	1	—
Relapsing Fever	—	—
Puerperal Fever	11	3
Cholera	—	—
Erysipelas	10	—
Plague	—	—

ALBERT E. BRINDLEY,

Medical Officer of Health.

Dated February 3rd, 1905.

APPENDIX C.

**CHRONOLOGICAL ORDER OF
DEATHS FROM CANCER DURING THE YEAR 1904.**

WARD.	ADDRESS.	SEX.	AGE.	DESCRIPTION.	ORGAN AFFECTED.	OCCUPATION.
Moorside ..	90, Taylor Street	F	50	Carcinoma ..	Uteri	Wife
Redvales ..	3, Palace Street.....	F	39	Carcinoma ..	Esophagus ..	Dressmaker
Church	45, Wyndham Street ..	M	63	Cancer	Tongue	Leather Currier
Church	4, King Street	F	58	Carcinoma ..	Liver	Wife
Elton	3, Starling	M	50	Cancer	Stomach	Coal Miner
Redvales ..	37, Mason Street	F	51	Carcinoma ..	Uterus	Wife
Church	32, Edward Street.....	F	55	Cancer	Not stated ..	Wife
East	Bright Street	F	42	Cancer	Liver	Widow
East	9, Back Kay Street	F	60	Carcinoma ..	Bowel	Widow
Redvales ..	34, Irwell Street	F	63	Carcinoma ..	Uteri	Widow
Church	12, South Back King St.	M	59	Epitelioma ..	Arms	Tailor
East	5, Wood Street	M	70	Cancer	Intestine	Retired Grocer
Church	121, George Street	F	57	Malignant Disease	Intestine	Wife
Moorside ..	26, Walmersley Road ..	F	49	Carcinoma ..	Breast	Confectioner
Moorside ..	Dispensary Hospital....	F	54	Cancer	Rectum.....	Wife
Moorside ..	28, Tile Street.....	M	62	Cancer	Larynx	Brass Finisher
Redvales ..	11, Benson Street	F	65	Cancer	Uterus	Confectioner
Church	25, King Street	M	58	Cancer	Stomach	Labourer
Elton	63, Newbold Street	F	70	Carcinoma ..	Stomach	Widow
Elton	39, Bolton Road.....	M	52	Sarcoma	Neck	Newsagent
Moorside ..	28, St. Anne's Street ..	M	37	Carcinoma ..	Groin	Labourer
Moorside ..	22, Clifton Street	F	76	Cancer	Stomach	Widow
East	31, Broad Oak Lane	F	45	Cancer	Not stated ..	Wife
Moorside ..	286, Hornby Street	F	43	Carcinoma ..	Cervix	Wife
Moorside ..	16, Vernon Street	F	38	Carcinoma ..	Uterus	Wife
East	8, Laurel Street.....	F	72	Cancer	Breast	Wife
Redvales ..	12, Tenterden Street ..	M	63	Cancer	Omentum....	Agent
Moorside ..	15, Oram Street.....	F	60	Carcinoma ..	Uteri	Wife
Moorside ..	46, Badger Street	M	78	Epitelioma ..	Face	Boiler Maker
East	139, Wash Lane	F	54	Cancer	Breast	Daughter
Moorside ..	63, Chesham Road.....	F	53	Cancer	Uterus	Wife
Moorside ..	1, Garston Street	F	53	Carcinoma ..	Liver	Wife
Moorside ..	8, Hanson Street	M	65	Carcinoma ..	Intestine	Bricklayer
Moorside ..	82, Hornby Street	F	56	Cancer	Stomach	Widow
Redvales ..	17, Ormerod Street	F	61	Cancer	Spleen	Confectioner
Elton	22, Lord Street	F	38	Scirrhus	Breast	Wife
Moorside ..	138, Chesham Road	F	62	Cancer	Intestine	Wife
Redvales ..	59, Tenter Street	M	45	Epitelioma ..	Tongue	Platelayer
Redvales ..	19, Hill Street.....	M	60	Epitelioma ..	Jaw.....	Painter
Redvales ..	25, South Cross Street ..	M	63	Carcinoma ..	Not stated ..	Fitter
Redvales ..	10, St. Mary's Place	F	41	Carcinoma ..	Not stated ..	Housekeeper

APPENDIX D.

DEATHS FROM PHTHISIS.

Ward.	Address.	Sex.	Age.	Occupation.
Moorside	21, Moor Street	M	24	General Labourer.
Moorside	29, Birley Street	F	27	Costumier.
Moorside	9, Brunswick Street	F	28	Wife.
Church	74, East Street	F	43	Wife.
Moorside	12, Hornby Street.. .. .	F	11	Daughter.
Church	Clerke Street (Union Workhouse)..	M	41	General Labourer.
East	26, Pearson Street	M	18	Son.
Elton	9, Webb Street	M	20	Engine Cleaner.
East	29, Bell Lane	M	42	Carter.
Church	5, Castlecroft	M	37	Tailor (Journeyman)
Elton	39, New George Street	M	29	Iron Turner.
East	23, Shaw Street	F	1 mth	Daughter.
Moorside	13, Greenhalgh Row	F	14	Daughter.
East	2, Bambury Street	M	10	Son.
Church	16, Trinity Street.. .. .	M	42	Manager.
Church	7, West Back o'th' Square.. .. .	M	63	Iron Fitter.
East	11, Samuel Street.. .. .	M	55	Boiler Maker.
Church	Clerke Street (Union Workhouse)..	M	54	Cabinet Maker.
East	2, Back Chesham Place	M	34	Labourer (Bricklayer's).
East	17, Shaw Street	F	23	Operative (Cotton).
Redvales	11, Tenters Court.. .. .	F	39	Wife.
East	6, Ramsbottom Square	F	10	Daughter.
Moorside	19, Topping Street	F	15	Daughter.
Church	20, Wyndham Street	F	19	Fancy Draper's Assistant.
Elton	127, Ainsworth Road	M	51	Overlooker (Cotton).
East	38, Queen Street	M	27	General Labourer.
Moorside	25, Pump Street	F	2	Daughter.
Moorside	Hornby Street (Union Workhouse)	F	30	Ring Spinner.
East	8, Duckworth Fold	M	25	Wheelwright.
East	Union Workhouse	M	45	Carter.
Church	8, Frank Street	M	45	Greengrocer.
Elton	15, Wellington Street	F	64	Widow.
Elton	459, Walshaw Road	F	65	Wife.
Church	60, Frederick Street	M	56	Stone Quarryman.
East	Kay Street (Union Workhouse) ..	M	45	Bootmaker.
East	Robin Hood Inn, Rochdale Road ..	M	49	Bookkeeper.
Moorside	8, Argyle Street	M	40	Insurance Agent.
Moorside	60, Vernon Street.. .. .	M	30	Cotton Loom Overlooker.
Moorside	378, Walmersley Road	M	41	Stonemason.
Moorside	2, Hamilton Street	M	67	Retired Master Ironmoulder.
Church	Nuttall Yard (Union Workhouse) ..	F	28	Cotton Ring Spinner.
Redvales	10, Tentersfield Street	M	36	Outdoor Labourer.
Church	84, Frederick Street	F	47	Widow.
Church	17, Broad Street	M	44	Political Club Steward.
Moorside	21, Topping Street	M	38	Cabdriver.
Moorside	Brook Street (Union Workhouse) ..	M	58	Carter
Redvales	4, Springs	M	45	House Painter.
Elton	6, Charles Street	F	25	Wife.

DEATHS FROM PHTHISIS—Continued.

Ward.	Address.	Sex.	Age.	Occupation.
Elton	4, Milton Street	M	16	Crofter.
Elton	65, Lord Street	M	40	Stonemason.
Elton	20, Victoria Row	M	8	Son.
East	117, Deal Street	M	64	Stonemason.
Redvales	35, Heaton Fold	M	26	Stonemason's Labourer.
Church	28, Clerke Street (Union Workhouse) ..	M	36	Farm Labourer.
Moorside	27, Raven Street	F	23	Wife.
Church	King Street	M	35	Carter.
Moorside	3, Taylor Court	M	35	Labourer.
Elton	8, Goodlad Street.. .. .	F	23	Cotton Weaver.
Elton	Wellington Barracks	M	18	Soldier.
East	123, Rochdale Old Road	M	30	Labourer.
East	77, Rochdale Road	F	16	Daughter.
East ..	Bell Lane (Union Workhouse).. .. .	M	59	Stoker.
Elton	30, Fenton Street	M	19	Bookbinder.
Church	41, Union Square (Union Workhouse)..	M	40	Hawker.
Moorside	6, Garston Street	M	35	Cotton Spinner.
Redvales	12, Peel Street	M	48	Railway Lurryman.
Elton	49, Charles Street.. .. .	F	27	Wife
East	9, Parsonage Street	M	46	Scavenger (Corporation)
East	Kay Street (Union Workhouse)	M	45	Labourer.
East	10, Kay Street	M	57	Journeyman Clogger.
Church	Clerke Street (Union Workhouse)	M	61	Circular Sawyer.
Church	23, Frederick Street	M	63	Labourer.
Redvales	22, Tinline Street.. .. .	M	30	Iron Fitter.
Church	56, Union Square (Union Workhouse) ..	M	33	Actor.
Church	11, East Street	M	50	Upholsterer.
Elton	40, Wood Street	F	14	Daughter.
East	14, Rochdale Old Road	M	28	Railway Porter.
Church	34, Union Street	F	26	Wife.
Elton	11, Topping Street	F	39	Cotton Weaver.
Moorside	25, Oram Street	F	42	Felt Hat Trimmer.
Church	50, Cross Street	M	26	Labourer in Felt Hat Works.
Redvales	21, Doctor's Lane	M	35	Gasfitter's Labourer.
Moorside ..	21, Britannia Yard	M	28	Bricklayer's Labourer.
Redvales ...	19, Parker Street	M	4	Son.
East	9, Cobden Street	M	44	Ironmoulder's Labourer.
East	Crescent (Union Workhouse)	M	28	Labourer.
East	4, Grundy Street	M	29	Raiser at Bleachwork's.
Redvales	31, Openshaw Street	M	39	Insurance Agent.
Church	66, Wyndham Street	M	43	Carter.
Elton	12, Portland Street	F	46	Cotton Winder.
Elton	94, Victoria Street	M	53	Labourer.
Elton	Woodbank Terrace	M	48	Farm Labourer.
Church	Clerke Street (Union Workhouse)	M	58	Cotton Labourer.
Chnrch ..	11, George Street	M	42	Outdoor Labonrer.
Elton	15, Pine Street	F	25	Cotton Mill Operative.
Elton	Hinds' Colliery	M	24	Market Gardener.
Redvales	8, Palace Street	M	31	Plumber.

APPENDIX E.

The following is a census of the sanitary conveniences within the Borough, a comparison being made with those of the preceding years :—

	1904.	...	1903.	...	1902.
Number of privies	5016	...	5278	...	5458
Number of ashpits in connection					
with privies... ..	2635	...	2782	...	2867
Number of pails... ..	714	...	784	...	795
Number of dry ashpits in connection					
with pails... ..	365	...	391	...	397
Number of mill tanks... ..	35	...	41	...	44
Number of fresh water closets					
(outside)	1478	...	1243	...	1186
Number of fresh water closets					
(inside)	731	...	723	...	723
Number of waste water closets... ..	2083	...	1789	...	1569
Number of dry ashpits in connection					
with water closets... ..	1335	...	1154	...	1042
Number of bins in connection with					
water closets... ..	624	...	492	...	450

WORK PERFORMED IN THE NIGHTSOIL DEPARTMENT DURING THE
YEAR 1904, ALSO COMPARISON WITH THE YEAR 1903.

	1904.	...	1903.
Number of privies and ashpits emptied	25886	...	26330
Number of loads removed from same	12962	...	13070
Number of loads removed from dry ashpits	2584	...	3018
Number of barrels of excreta removed from			
pail closets, &c.	953	...	965
Number of Notices received for ashpits to be			
emptied	1122	...	1013
Amount of waste paper collected from September,			
	30-tons 11-cwts. 1-qr.		

INDEX.

	PAGE
Abattoirs	59
Acreage of the Borough	9
Annual Rate of Mortality	9
Antitoxin in Diphtheria	37
Ashpits, Census of	101
Annual Rate of Mortality compared with other Towns	20
Bacteriological Examinations.	33—37—56
Bakehouses.....	92
Births.....	11
Bronchitis	17
Canal Boats Act	76
Cancer	57—98
Cause of, and Ages at, Death	14
Chart—Scarlet Fever.....	29
Classification of Deaths	17
Cleansing Department.....	71—74
Collection of Waste Paper	73
Committee, Health.....	3
Committee, Cleansing	71
Committee, Cleansing, Duties of	71
Common Lodging-Houses	79
Coroner's Inquests.....	19
Croup, Membranous	36
Dairies, Cowsheds, and Milk Shops	59—60
Death Rate for England and Wales.....	20
Deaths, Classification of Causes of	17
Deaths Registered from all causes during 1903	95—96
Deaths uncertified.....	19
Density of the Population	9
Diarrhœa.....	52—53
Diphtheria.....	36—37
Diseases of the Respiratory System.....	17
Disinfection	58
District Mortality Rates.....	13
Deaths of non-residents.....	12
Deaths, number of.....	12
Elevation of the Borough.....	9
Enteric Fever.....	32—33
Enteric Fever—Analysis of Cases.....	34—35
Estimated Population.....	11
Excrement and Refuse Disposal	101
Explosives Act, Work in connection with	80

	PAGE
Factory and Workshop Act... ..	63—69—84—85
Farms... ..	59—60—92—93
Feeding of Infants... ..	22—23
Food and Drugs Acts... ..	75
Hospital for Infectious Diseases, Number of Cases treated in..	26
Hospital Accommodation for Smallpox... ..	39
Houses Let in Lodgings... ..	79
Ice Cream Makers and Vendors	94
Illegitimacy	22
Infantile Mortality	21—24
Infantile Mortality, Analysis of	24
Infectious Diseases, Notification of	25—26
Infectious Diseases, Notified 1904	25—26
Infectious Diseases, Cases treated in Hospital	26
Influenza... ..	51
Inquests	19
Knacker's Yard... ..	94
Lodging-Houses	79
Longevity	18
Malignant Disease... ..	57—98
Marriages... ..	13
Measles... ..	48—49
Meat Inspection	59—87—91
Membranous Croup	36
Meteorology	10
Mortality, Annual Rate of	9
Mortality, at different ages... ..	17
Mortality, compared with other towns	20
Mortality, in various Wards	13
Mortality, Infantile... ..	21—24
Natural Increase of Population	12
Nightsoil Work... ..	72
Notification of Infectious Diseases... ..	25—26
Notification, School	44
Notification of Phthisis	55
Nuisances, Notices served for abatement of	81—82
Ophthalmia—Handbill re	45
Occupation and Phthisis	55—56
Old Age	18
Offensive Trades	93
Outbreak of Smallpox... ..	39
Outbreak of Smallpox—Cost of	39
Petroleum Acts... ..	30
Phthisis	54—56—99—100
Pneumonia	18
Population, Estimated	11

	PAGE
Population, Natural increase of	12
Population of Municipal Wards	11
Public Elementary Schools and Epidemic Diseases... ..	44—47
Public Urinals	74
Puerperal Fever... ..	37
Quarterly Returns of Infectious Diseases	26
Rainfall	10
Report of Borough Analyst... ..	75
Report of Inspector of Canal Boats... ..	76
Report of Meat Inspector	87
Report of Nurse Walton... ..	77
Respiratory System, Diseases of... ..	17
Return of Infectious Diseases to Local Government Board ...	97
Sale of Food and Drugs Acts	75
Sanitary Inspectors, Work done by	78—86
Scarlet Fever	27—30
Scarlet Fever, Return Cases of... ..	28—31
Scavenging	74
School Closures... ..	46—47
School Notification of Infectious Diseases... ..	44
Shop Hours Act	80
Smallpox and Vaccination	38—43
Smallpox, Analysis of Cases... ..	42—43
Smallpox, Description of Cases	39
Smallpox Outbreak—Cost of... ..	39
Smoke Nuisance	70
Smoke Observations	81
Sputum, Examination of	56
Statistical Summary for 1903... ..	9
Street Watering	73—74
Summary of Deaths... ..	95—96
Tubercular Diseases	54—56
Tuberculosis, Extent of, in Carcases, &c.	87—91
Typhoid Fever	32—33
Urinals, Public... ..	74
Vaccination	38—43
Vagrancy and Smallpox	40—41
Vital Statistics (whole district)... ..	12—15
Vital Statistics (separate localities)	16
Ward Distribution of Infectious Diseases... ..	26
Ward Distribution, Pneumonia	18
Waste Paper, Collection of... ..	73
Water Carriage System, Conversions to... ..	72—73—78—79
Water Supply... ..	61—62
Watering of Streets... ..	73—74
Whooping Cough	50—51
Zymotic Diseases	17